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No. 2600.—VOL. LV. LONDON, SATURDAY, JUNE 20, 1885. PRICE ..... SIXPENCE. BY POST, £1 4s. PER ANNUM.

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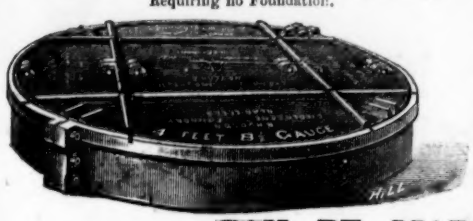

Upwards of 25,000 of these Trucks and Wagons have been supplied to the South African Diamond Mines; American, Spanish, Indian, and Welsh Gold, Silver, Copper, and Lead Mines; Indian and Brazilian Railways, and to Railway Contractors, Chemical Works, Brick Works, and Coal and Mineral Shippers, &c., &c., and can be made to lift off the underwork, to let down into the hold of a vessel, and easily replaced. They are also largely used in the Coal and other Mines in this country, and are the LIGHTEST, STRONGEST, and most CAPACIOUS made, infinitely stronger and lighter than wooden ones, and are all fitted with R. H.'s Patent "Rim" round top of wagons, requiring no rivets, and giving immense strength and rigidity. End and body plates are also joined on R. H.'s patent method, dispensing with angle-irons or corner plates.

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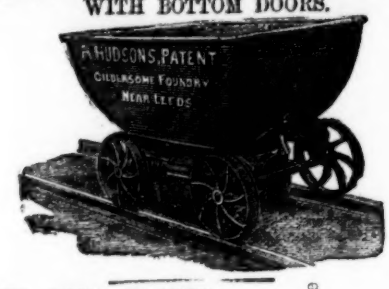
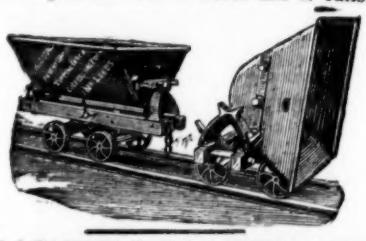
1.—PATENT STEEL END TIP WAGONS.

7.—PATENT STEEL MINING WAGONS.

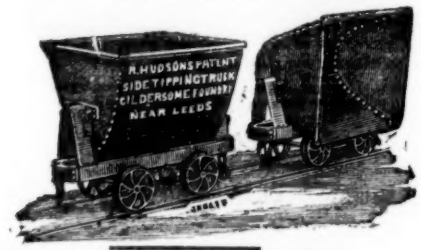
12.—PATENT STEEL HOPPER WAGON, WITH BOTTOM DOORS.



2.—PATENT UNIVERSAL TRIPLE-CENTRE STEEL TIPPING TRUCK,
Will tip either SIDE or either END of rails.



8.—PATENT DOUBLE-CENTRE STEEL SIDE TIP WAGONS,
Will tip either side of Wagons.

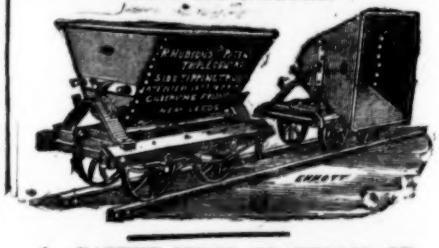


13.—PATENT STEEL HOPPER WAGON.

15.—R. Hudson's Patent Steel Cage and "Fallers," &c., complete.

3.—PATENT TRIPLE-CENTRE STEEL SIDE TIP WAGONS.

One man can EASILY tip ANY WEIGHT in these wagons.



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(The "CATCH" can also be made SELF-ACTING if desired.)

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10.—LEFT-HAND STEEL POINT AND CROSSING.

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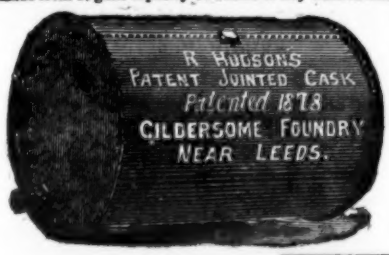
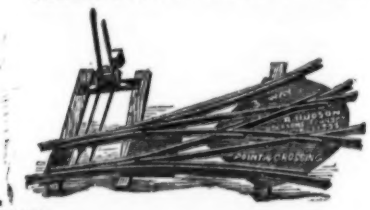


11.—RIGHT AND LEFT-HAND STEEL POINT AND CROSSING.



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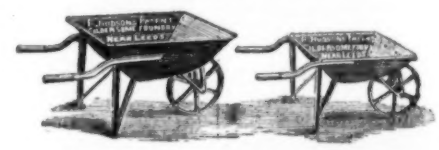

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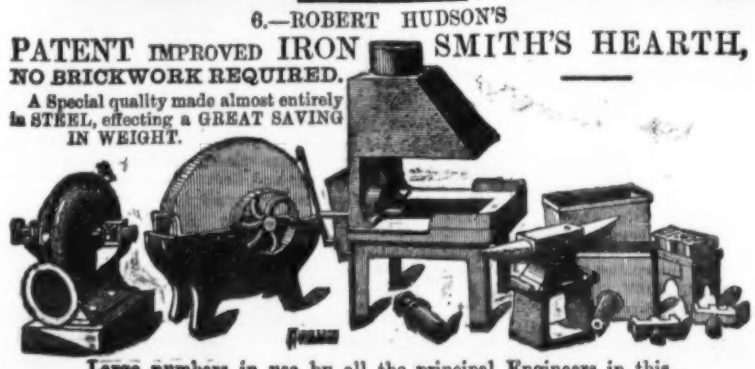

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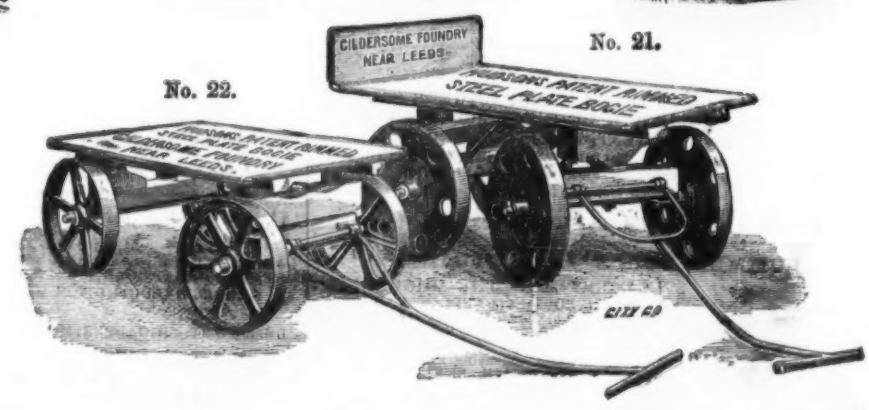

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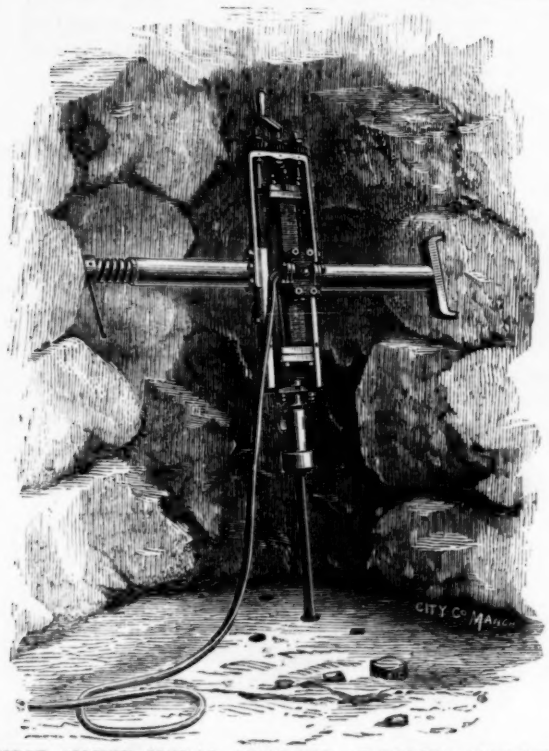

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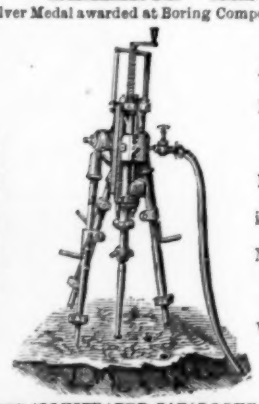

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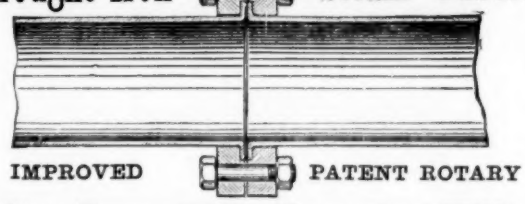

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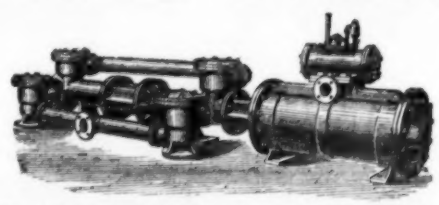

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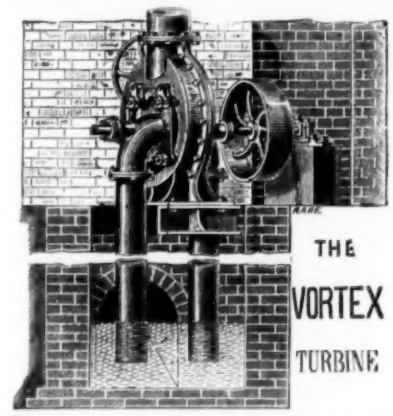

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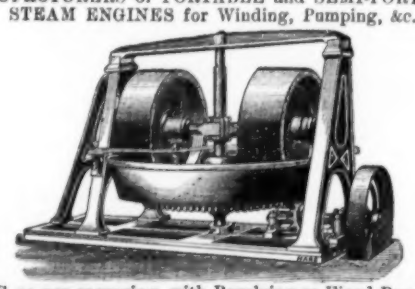

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Original Correspondence.

GUINEA COAST GOLD COMPANY.

SIR,—"No" praises the pluck of Messrs Johns and Nixon in not resigning their seats on the board of this company (as the three other directors did) rather than meet the shareholders at the general meeting. But surely the exigencies of the case required that these two should not resign. Resignation would in their case have been moral suicide, for they have been the leading spirits in the whole business, and they and their friends divided a large sum which came out of this hapless company's capital, for very shame, therefore, they could not follow the example of their three co-directors. Has "No" considered the significance of the resignation of these gentlemen? Is it possible to conceive that three of five directors would resign just before the annual meeting unless there were very cogent and serious reasons for their doing so.

Is it possible to believe that if these gentlemen had clear consciences and knew that everything had been fair and above board all three would have retired? Actions speak louder than words. The *bona fide* shareholders have, as I predicted 15 months ago they would, lost every penny of their money. As far as they are concerned the scheme has been a total failure as I clearly foresaw, and said it would be, still it has to some extent answered the purpose for which it was formed. Let me explain. Just before the company was floated Messrs, Johns and Nixon (with others whose names I do not know) had become practically the owners of the Izrah property at a price that represented a mere fractional part of the annual profit which the prospectus said would be derived by this company from the rich reef that was described. Of course, the purchase was made in the hope of selling at a large profit. But, then, any ordinary purchaser would require some better evidence of the existence and value of the reef than the bare statements of a vendor and his agents, so that no ordinary purchaser would serve the purpose.

It was necessary, therefore, to create the purchaser, and so this company was formed; Messrs. Johns and Nixon were made directors, and they bought the property of the syndicate for no less a sum than 75,000*l.*, they, fortunately for the syndicate, neither obtaining or indeed requiring any independent and unprejudiced evidence, even of the existence, much less of the value of the alleged reef. No; they elected to swallow as Gospel truth the vendor's statements about his property, statements which we know were absolutely untrue, and they accepted these statements although they knew that the vendor had agreed to take for his property a sum that was about a sixth part of what they (relying only on the vendor's statements noted this) estimated would be the annual profit from the property. Now, observe by this sale so carried out Messrs. Johns and Nixon, and their syndicate confederates, netted 35,000*l.* in cash, cash which came out of the pockets of the *bona fide* shareholders. Observe further that neither Mr. Johns, Mr. Nixon, or any other director would for one moment have thought of acting in this way had he been laying out his own private money. No sane man would. Observe that they were dealing with a very large sum, and that that sum was trustmoney—facts that ought to have made them scrupulously careful not to neglect even extraordinary precautions against fraud; yet they thought it right and proper to omit the most obvious, the most ordinary and usual precautions. Observe that the question reef or no reef was vital to the company, and observe further that if Messrs. Johns and Co., had taken the most ordinary, I may say the invariable, precautions taken by vendors this company would have saved its money, and (though that would have been of no consequence) the syndicate would not have made its profit. And now let me ask every disinterested person who may see this letter whether the transaction I have described, even if honest in the eye of the law, was such a transaction as can be defended on any moral ground whatever? Was it not, in fact, a scandalous transaction, of which every one who took part in it ought to be thoroughly ashamed? Is it at all astonishing that three out of the five directors should have declined under the circumstances to face the general meeting?

In conclusion, I will add that if the aforesaid transaction cannot be impeached at law, then the law requires alteration in order to meet cases of this kind.—*New Broad-street, June* 15. P.

RIVER CONCESSIONS ON THE GOLD COAST.

SIR,—Allow me to correct a slight mistake which occurred in my letter in you last issue. The best prospect I obtained was got from a small river at the mouth of the Ankobra, and which I believe runs through the Apatim property. The next best I got was in the Ankobra river 6 miles above the Akankoo, in 20 ft. of water, from a stiff yellow clay, and which gave, on being washed, 4 ozs. 5 dwts. per ton of stuff, and not 4 or 5 dwts. as stated.

DAVID H. LOWMAN.

78, *Manby-road, Leyton-road, Leyton, Essex, June* 18.

FOREIGN ACCIDENT INSURANCE.

SIR.—My son is out in the Asia Minor Mine, as manager. Will you, or your readers, kindly inform me if you know of an insurance company or office, which insures against accidents whilst a man is away from home. He, my son, was insured at home with the Railway Accident, &c., but now he is out of Europe the policy is worthless. WILLIAM JONES.

Great Darren Mine, Bow-street, R.S.O., Cardiganshire June 16.

ENGLISH AND AUSTRALIAN COPPER COMPANY.

SIR,—As it is almost impossible to get shareholders to take action with respect to their property without the aid of the Press, and often quite so to induce directors to adopt any reforms, unless under extreme pressure from the shareholders, I ask you kindly to allow me a little space for comment upon the affairs of the above company. The paid-up capital is 175,000*l.*, aided by 30,000*l.* to 40,000*l.* more in the shape of loans; these figures should be remembered. The aggregate amount of dividend paid during the last nine years was 28,000*l.*, but the actual trade earnings were 18,500*l.* only, and this entirely from the wharf, the difference being made up from such items as the following:—Unclaimed dividends, 495*l.*; rents and royalties in Australia, 630*l.*; registration fees, 71*l.*; interest, 327*l.*; interest on reserve fund, 1877-78, 928*l.*; reserve fund, 5450*l.*; and amount carried forward, 1622*l.*

If now it is asked what has been earned and paid to the shareholders during this long period upon the main business of the company—the smelting business—the reply is, nothing whatever, although, according to the reports, the copper made during the time was no less than 17,500 tons.

While, however, the accounts exhibit this miserable return of only 18,500*l.* as the result of nine years' trading, the directors, contented to go on borrowing money year after year at from 7½ per cent. to 10 per cent., have positively paid away from the company in interest, during the period in question, upon loans, averaging in all in round numbers some 40,000*l.*, a sum of over 30,000*l.* The accounts give the amount as 28,668*l.*, but to this must be added the interest earned since 1878 upon the reserve fund; and 1448*l.* additional was paid for interest in London. It is understood, of course, that this interest was upon the terms current in Australia, but what of that; is money not to be had elsewhere? If no better terms are possible, surely this 7½ per cent. to 10 per cent. should, in the first instance, be offered to the shareholders.

Some of the shareholders, profoundly dissatisfied with these anomalous and astounding results, are moving for an enquiry into the whole administration of the company's affairs, and it remains for the proprietors generally to assist them in their laudable and much-needed endeavours. The enquiry, besides dealing with the loan question, should include the following matters:—System of purchasing, and best method of treating, ore; revision of salary lists; number and emolument of directors; and last, but not least, best disposal of property now unused or unremunerative. It is also desirable to arrange the presentation of the accounts in a satisfactory manner, so as not to mislead.

For instance, the sum earned as interest on the general reserve fund should come into the account as it did up to 1878, and not as now be deducted from the amount of interest paid in Australia; the present plan simply understating by the amount so deducted the actual amount of both income and expenditure. Again, such lines as these in the reports are in quite unbusinesslike form. Wages, salaries, and general expenses of management in Australia, 11,556*l.*; London charges, including rent, office expenses, salaries, stationery, printing, advertising, directors, auditors, &c., 1892*l.* The amounts of all such items as make up this last sum should be stated separately, as in the accounts of the Eastern and the Globe Telegraph companies, the London and colonial charges being of course kept apart as at present. J. S. HADFIELD.

Mechanics' Institute, Stockport, June 17.

NEW HOLMBUSH MINE.

SIR,—On a recent visit to the above mine in addition to their arsenical mundic and copper I find the Flapjack lode, at the 160 fm. level, is producing some real good work for tin, and taking the character of the lode generally, my candid opinion is that it is becoming a very profitable tin mine in depth is a certainty, as the lode is large and well defined, composed of arsenical mundic, copper, quartz, and capel. Where they find the most tin there is hardly any copper to be seen. The district between this and the Tamar river has a similar formation to the Carn Brea Hill, near Camborne and Redruth. Too much importance cannot be attached to this discovery of tin, as the mine was near paying cost before, with all the extra charge of cleaning up Wall's shaft 24 fathoms deeper, so as to be at the bottom of that part of the mine; also putting up air-compressor and receiver, with all necessary pipes, preparatory to sinking the higher shaft 30 fathoms deeper. Nothing that has transpired the last two years in the metal market has caused so much satisfaction as the gradual rise in tin since the commencement of this year, the metal being nearly 100*l.* per ton: 100*l.* per ton I believe to be quite high enough for the English miner: 100*l.* now is better than 140*l.* was 40 years ago. There is all that difference in the cost of dressing, as depression has caused the studying of economy and improvements, and New Holmbush can very well boast of its machinery, now in splendid working order. Taking the length and breadth of the sett, the depth of shafts, with the general appearance of the mine, it will be a dividend paying one hundreds of years to come, and be the means of causing many other legitimate concerns to start in the district. The managers and directors undoubtedly have had a lot of hard uphill work to do, and they must have had a long pull, a strong pull, and pulled all together, to accomplish what is visible for anyone to see. I think they may congratulate themselves that they are now near the top of a gentle decline, and I hope they will be able to have a pleasant run down. JNO. BUCKINGHAM.

Callington, June 17.

WEST KITTY.

SIR,—May I suggest to the shareholders who wish to know the exact state of this property the propriety of sending their own agents to inspect the mine, instead of giving credence to statements which I am sorry to say are unworthy of any men claiming to occupy respectable positions in the City of London, or elsewhere. Captain Josiah Thomas, of Dolcoath; Capt. White, of Wheal Agar; Capt, Bishop, of East Pool; or Capt. Hambly, of Wheal Uny, and some others whose reputation is so high as to put them quite beyond suspicion, can be easily communicated with by anybody, and for about 3 guineas will give the most minute information concerning the direction of the lode and present position and future prospects of the undertaking. The necessary inspection order, on application to the secretary, will be forwarded without delay.

I will take this opportunity of saying, also, that with the market fluctuations in the shares of the company we have nothing whatever to do in this office. No official connected with the mine has ever had a speculative account open either for the rise or for the fall in the shares, and we are as a rule unable to account for the fluctuations which take place from time to time, being in complete ignorance of the facts upon which we could alone base reliable calculations.

Walbrook, June 18. JOHN B. REYNOLDS.

COMMERCIAL FAILURES.

The number of failures in England and Wales gazetted during the week ending Saturday, June 13, was 82. The number in the corresponding week of last year was 43, showing an increase of 39, being a net increase in 1885, to date, of 214.

The failures were distributed amongst the following trades, and, for comparison, we give the number in each in the corresponding weeks in 1883 and 1884:—

	1885.	1884.	1883.
Building trades	10	5	26
Chemists and druggists	3	1	—
Coal and mining trades	1	1	2
Corn, cattle, and seed trades	1	—	8
Drapery, silk, and woollen trades	12	4	24
Earthenware trades	—	—	4
Farmers	3	2	8
Furniture and upholstery trades	1	—	4
Grocery and provision trades	9	9	40
Hardware and metal trades	3	2	12
Iron and steel trades	8	1	8
Jewellery and fancy trades	5	2	9
Leather and coach trades	1	2	18
Merchants, brokers, and agents	6	7	24
Printing and stationery trades	5	1	5
Wine, spirit, and beer trades	6	2	25
Miscellaneous	8	4	17
Totals for England and Wales.	82	43	234
Scotland	29	17	22
Ireland	—	7	6
Totals for United Kingdom	111	67	262

The number of Bills of Sale published in England and Wales for the week ending June 13, was 254. The number in the corresponding week of last year was 196, showing an increase of 58, being a net increase in 1885, to date, of 203. The number published in Ireland for the same week was 10. The number in the corresponding week of last year was 21, showing a decrease of 11, being a net decrease in 1885, to date, of 9.—*Kemp's Mercantile Gazette.*

ROYAL METEOROLOGICAL SOCIETY.—The concluding meeting of this society for the present season was held on Wednesday at the Institution of Civil Engineers, 25, Great George-street,—Mr. R. H. Scott, F.R.S., the President, in the chair. Lieut. A. Leeper, R.N., was elected a Fellow of the Society. The following papers were read:—1. "A Few Meteorological Observations made on a Voyage up the Nile in February and March, 1885," by Dr. W. Marcet, F.R.S. The author on a voyage up the Nile from Cairo to Assouan made a series of meteorological observations, and in the present paper gives the results of those relating mainly to nocturnal radiation and the temperature of the water of the Nile.—2. "The Mean Direction of Cirrus Clouds over Europe," by Dr. H. H. Hildebrandsson, Hon. Mem. R. Met. Soc. The author has collected a number of observations on the movements of cirrus clouds over various parts of Europe, and after discussing them has arrived at the following results—(1) the mean direction at all stations lies between south-west and north-west; (2) in winter the cirri come from a more northerly direction, and in summer from a more southerly; (3) in winter the northerly component is greater on the Baltic and the north coast of the Mediterranean; (4) the mean directions of the upper currents nearly coincide with the mean tracks of storm centres; (5) the upper currents of the atmosphere tend in general to flow away from those areas in which a barometrical depression exists at the earth's surface towards those in which there is an elevation of pressure.—3. "On the Influence of Accumulations of Snow on Climate," by Dr. A. Woeikoff, Hon. Mem. R. Met. Soc.—4. "Note on the Weather of January, 1881," by Mr. E. Harding, F. R. Met. Soc. It will be remembered that the weather of January, 1881, was remarkable for the prolonged and exceptionally severe frost, the heavy gale of the 18th and 19th, and the snow storms. The author has prepared isobaric charts for the North Atlantic and adjacent continents for January, 1881, and compared it with similar charts for January in other years. He shows that the severe weather in 1881 was due to a reversal of the normal conditions, the atmospheric pressure being high in the north and low in the south.—5. "Results of Meteorological Observations made in the Solomon Group, 1882-84," by Lieut. A. Leeper, R.N.—6. "Graphic Hygrometrical Table," by Mr. D. Cunningham, M. Inst. C.E., F. R. Met. Soc.

THE GOLD AND DIAMOND FIELDS OF SOUTH AFRICA—No. VII.

BY THOMAS COLLINGWOOD KITTO, M.E.

I spent a fortnight examining the Bok Veldt, during which time I tested a great number of quartz reefs, but did not find a trace of gold. I tested several large runs of gravel, which resembled so closely in appearance many parts of Australia that scores of diggers on their way to the diamond fields declared them to be auriferous, and were the means of causing many pits to be sunk; but, notwithstanding what has been said to the contrary, I am quite certain no gold has ever been honestly found in them. I tested the gravel in all the rivulets I came across; but only in one did I find a trace of the precious metal. This caused a temporary excitement, although if it were worked on a large scale the gold would cost over 200*l.* an ounce. During my examination of the Bok Veldt I stayed at the houses of several Dutch people, whom I found extremely kind and hospitable.

In examining the neighbourhood of Ceres I employed my Australian friend to show me over the various places where gold was said to have been found; we found traces of gold in some plac but nothing that could pay with gold at 50*l.* per ounce. Qua; reefs in the neighbourhood of Ceres are almost as plentiful as at Knysna and the George; but there is no portion of the neighbourhood that will ever produce gold in paying quantities. I next went to the Wolsley district, where I found the whole country in a great state of excitement consequent on the serious defeat suffered by the British troops at the hands of the Zulus. For a few days trade was at a standstill, and nothing was talked of but Isamdalwana and the glorious defence of Rorks Drift.

Wolsley proper is a bleak wind-swept plain, and the railway from Cape Town to the diamond fields passes through it. The most of the containing rock of the country is of a schistose character, and it is crossed and recrossed by numerous quartz veins. From Ceres-road Railway Station to the romantic Mitchell's Pass there are several very extensive runs of boulder drift, in which I expected to find gold, and I felt a little disappointed at not doing so. I first made a systematic examination of all the reefs in the neighbourhood, but did not find a trace of the precious metal. I then made an examination of the alluvial beds for many miles in extent, and the only place in which I got a small prospect of gold was near the Waverley Mills, but there was nothing that could possibly pay to work. It so happened that while I was prospecting one morning a gentleman whom I had seen at Ceres passed me on his way to Cape Town; he made very anxious enquiries as to what I thought of the country as to its gold-bearing capabilities. I informed him that hitherto I had seen nothing to lead me to believe that gold would ever be found in the Cape Colony in payable quantities, but having found a tiny speck that morning I showed it to him, and to say he seemed delighted is to draw it very mild indeed. He left by train for Cape Town, and I proceeded diligently with my investigation of the district, not thinking anything more about my Ceres friend or the insignificant speck of gold. A few days afterwards I was quite astonished, and the country electrified, to find that special arrangements were being made by the railway department for the conveyance of excursionists to the Wolsley gold fields and back again. Big posters announced the discovery of a rich gold field. Quartz reefs and alluvial were teeming with gold, and the most exaggerated reports were current everywhere; yet, singular enough, when the railway department, with its usual spirit of accommodation, provided facilities for the inspection of the Wolsley treasures a report of mine had for some days been in the hands of the Commissioner of Crown Lands, giving a very poor account of the mining outlook of the Wolsley, Ceres, and Bok Veldt districts. I no sooner discovered that a gross fraud had been perpetrated on the railway authorities than I took immediate steps to counteract it, and I am pleased to say succeeded to a very great extent, inasmuch as when the excursionists crowded in to get their tickets they were informed that the whole thing was a cruel hoax. The majority profited by the warning, but as usual there were a few extra clever ones who knew—"of course, it was as plain as a pike staff"—that the thing was all right, "only the railway people wanted to be first in the field." I had the pleasure of seeing a few of those who visited the supposed gold fields, most of whom stayed about a week, and were drunk the whole time.

My explorations in South Africa were not always devoid of amusement. One day on entering the compartment of a railway carriage, which was pretty full, I found that one of my reports on a certain-supposed gold field formed the chief topic of conversation. As no person knew me I had a good opportunity of listening to the various comments on myself without any embellishments. "He can't see into the bowels of the earth more than anybody else, tho' I must say his report bears the impress of training and experience," says one. "He certainly does not pander to the popular appetite for great expectations," says another. "I like the way he goes about his work; there is no hasty jumping at conclusions, and he carefully tests the different signs to see what they mean," says a third. "Damn him," said an old gentleman who was sitting in a corner directly opposite to me. "Damn him; I wish he had stayed at home in his own country; I don't believe the fellow knows anything at all about it. He says there is no gold on my property, when several old diggers have told me it is very rich, and that if we went deeper we should get the gold. I have spent hundreds of pounds, and was just about getting up a company to work it, and now nobody will look at it." The old gentleman asked me if I did not think Kitto was a duffer, and ought to be kicked. I replied, laughing, that I had a fairly good opinion of Kitto; and as I did not think him a very kickable subject I should advise anyone to pause before carrying such an operation into effect. I had to get out at the next station, so I handed my card to the gentleman sitting next to me, and it was passed around much to the amusement of all hands. The general characteristics of the country in the neighbourhood of Wolsley are such that any person might reasonably expect to find some gold, and I experienced a feeling of disappointment at not doing so.

I next moved on to the important town of Worcester, which is surrounded by thousands of acres of boulder drift, most of which looks favourable for the production of gold, but I could not find anything but the merest trace, and I was obliged to pronounce the place to be of no value for gold. While staying at Worcester I was called upon to examine a great many quartz reefs on private farms many miles from the town. In many cases there are regular and well-defined reefs 9 or 10 feet broad crossing runs of clay-slate, which have always been considered more or less auriferous. I took samples from all of them, and after

careful tests I was obliged also to pronounce them to be non-auriferous and of no value. There were those in the colony who induced the owners to believe that I was wrong, and that they should discover gold where I failed, the result being that two or three syndicates were formed for the purpose of sinking sundry shafts and doing other work to prove the reefs. They worked on for two years or more, and at intervals reports would appear in the papers of "an improvement in the reefs near Worcester, and that as soon as the necessary machinery was erected the concern would pay." It was all moonshine, for they never honestly found a trace of gold in any of the reefs. The samples which were afterwards shown to me and said to have been found near Worcester were smooth and pocket-worn, and had evidently done duty in a similar capacity at different places for years. Near Worcester there is a fine hot spring which issues from the ground quite hot enough to scald a pig. I also saw a small seam of fairly good marble, but it is too small to be of much value, and in my opinion the district is of no value for mining.

Trade Reports.

CORNWALL.

June 18.—That in face of the unsettled condition of our home politics the tin standard should not only have recovered last week's drop but made an additional advance speaks volumes for the condition and prospects of the market—for it is to its real position and not to any merely accidental cause of a temporary character that we attribute this change for the better. Under these circumstances we can only repeat our caution to holders in good mines that prices are even yet considerably below the figure that is likely to be touched in a few weeks' time.

Probably the smelters would be able to find fair reasons for justifying the last drop as a consequence of the tone of the London metal market, but they would be hard put to it to make anyone believe that they set about it in the right way, or that their subsequent action has been either fair or wise. We have said before, and we again repeat, that the advance of 2*l.* made promptly are far more to the advantage of the miner than one of 4*l.* delayed. This proposition, of course, ought to be self-evident, but judging by the way in which matters continue to be conducted we must suppose it cannot be. As things are now worked the more fluctuations there are in the market the better for the smelters, if they only exercise sufficient foresight as to stocks. Directly the market begins to gravitate downwards they drop the standards, and make themselves all safe. Not a day is lost then. But when the market begins to rise they wait awhile to make sure of their position, and the difference between prompt action in the one case and delay in the other is all clear gain, and the greater is the gain the oftener the process is repeated

We cannot blame the smelters for trying to make the best of their business, but we do blame the mining public for not trying to apply a remedy. The large mines can as well smelt their own produce as the smelters, and it is idle to suppose that they are not as competent to sell it in the metal, especially with the advantages that the telegraph affords. Everything seems to depend upon some one having the enterprise to lead the way.

It is not unlikely by present appearances that the mining constituency will see some lively times. The meeting of delegates cast 256 votes for Mr. Vivian and 191 for Mr. Conybeare, and the latter gentleman declines to be bound by the decision, declaring that the majority of the miners are in his favour. As Mr. Vivian cannot retire without the committee, and Mr. Conybeare will not, there is likely to be a sharp contest between them, with possibly a Conservative running third on the chance, though not a very promising one, of slipping in between the two.

We question much whether anyone whose practical opinions on the subject carries weight will endorse the statement that has been bluntly made that our mine inspectors "know nothing about mining," and that in consequence of this "accidents" often take place. The only inspectors of mines with whom Cornwall and Devon have had to do certainly do not come in such a category—Dr. Foster and Mr. Frecheville. Nor is ignorance in any case by any means the chief cause of our mining accidents. Some, of course, are accidental in the true sense of the term; but the majority are due either to thoughtlessness or recklessness as any examination of the casualty records of a year will show.

Mr. Rule's first examination has not come off in consequence of the failure of creditors who had proved their claims to put in an appearance. The liabilities are not so heavy as was at first reported—7060*l.* in all, but the available assets beyond preferential charges and securities only amount to 15*l.*, so that the deficiency is 7045*l.* Mr. Rule attributes his failure to the depreciation in the metal markets and in the value of shares; and Mr. Jenkins, the official receiver, reports:—"The debtor states that he commenced business as a mine broker in the year 1860 without any capital, but on the 1st January, 1881, his capital was 10,000*l.* The unsecured creditors are 27 in number, of whom there are 20 whose respective debts amount to 10*l.* and upwards. These are principally for goods supplied, money borrowed, mine calls, and differences on sales and purchases of stock and tin. He alleges that he has sustained losses during the last 12 months by the failure of mine speculators, who failed to carry out their bargains with him. The only account-book kept by the debtor is a ledger. The debtor states that he has had no income during the last three years, but has constantly been paying calls on mine shares; the annual amount of his household and personal expenditure during that period has been about 200*l.* a year. The debtor in March last executed a bill of sale on his furniture for 210*l.*, alleged to have been lent at the date thereof, and the holder of this bill of sale has taken possession of the goods comprised therein. The assets being under 300*l.*, an order for summary administration has been made under section 121 of the Bankruptcy Act, 1883, and the debtor, having stated that it is not his intention to make any proposal to his creditors either by a composition or scheme of arrangement, an order adjudging him bankrupt has been obtained." Mr. Rule's losses in a little over four years appear, therefore, to have exceeded 17,000*l.* Of the present assets, 15 shares in Wheal Grenville, and 75 in West Seton are claimed, under charge by Mr. R. W. Goold.

NORTH AND SOUTH STAFFORDSHIRE.

June 18.—The best feature of the Coal Trade at date is the stronger prices which are being obtained for slack than for coal. This applies alike to the Cannock Chase and the Black Country districts proper, though it is the most marked on the Chase. In order to get trade for large coal competition among the big companies keep severe, and a good deal of underselling is going on, alike as regards manufacturing and house fuels. "List" prices of coal are based upon the figures of 9s. to 9s. 6d. and 10s. per ton for furnace, and best house coal: steam and bright "nuts," 7s. to 7s. 6d.; forge sorts, 6s. to 6s. 6d.; slack, 4s. 6d., 5s., and 5s. 6d., per ton. On 'Change this week it did not appear that pig-iron buyers were desirous of enlarging their present stocks. It was not therefore easy to get them to specify for further deliveries, while wholly new business was tame. Hot blast all mine sorts are 55s., part-mine sorts 40s. and upwards, and cinder pigs 32s. 6d. to 35s. Derbyshire pigs are abundant at 40 to 41s., and other foreign sorts in proportion. Finished ironmasters report this week that in view of stock-taking at the end of this month not a few buyers are curtailing their demands, and the result is increased difficulty on the part of masters to keep the mills in active employ.

The colliers and masters at Samson Colliery, Oldbury, cannot agree concerning the contributions to be paid by the men to the Employers' Liability Assurance Corporation. The masters have given the men notice that the contributions are to be raised from 2d. to 3d. per week. The men are opposed to being connected with the Corporation, and prefer to pay to the South Staffordshire and Worcestershire Permanent Provident Society. They threaten a strike if the demand is enforced, but a deputation has been appointed to wait upon the employers with a view to a settlement.

Notice to cancel all contracts has been given by Messrs. Cooper and Craig, of the Podmore Hall Colliery, near Newcastle-under-Lyme, to their employees at the Hayeswood Pits. Mr. W. Y. Craig, M.P., explained to the men a few days ago that during the last four years the colliery had not paid him a shilling; while, on the other hand, he had expended 30,000*l.* in sinking the Minnie Pit, which would require a further outlay of 10,000*l.* to fully develope. The advance of wages asked for by the Hayeswood workmen—about 200 in number—could not be conceded, and he should be compelled to close that part of his colliery. The prices paid for coal getting generally at the Podmore Hall Colliery must also be readjusted, though special prices would be given for special work. It is intended that the development of the Minnie Pit shall be continued.

DERBYSHIRE AND YORKSHIRE.

June 18.—Some disagreement has arisen at two or three collieries in North Derbyshire consequent upon the enforcement of the 10 per cent. reduction. The men have found grievances, always an easy matter, that they consider should be rectified. But the reduction of wages is the actual grievance, and that the men will have to submit to unconditionally. Indeed, it will be well if the reduction recently made is the only one that will be made during the present year, seeing that prices of coal are likely to come down to a lower point than they have touched for many years past. The summer trade, indeed, promises to be particularly dull, and even thus early in the season house coal is becoming a drug in all our leading markets, including the Metropolis. Short time, even now, has become a necessity in the Midland districts more especially, and there is no doubt will become more general as the season advances. To the Metropolis there has been a falling off of a rather marked character in the tonnage of house coal sent from the leading collieries in Derbyshire, including Clay-cross and Eckington. Prices, as before stated, are extional for both the inland and sea-borne coal. Best Silkstones are delivered to consumers in London at 20s. per ton, and other qualities at 18s. and 19s. When from these prices are deducted the carriage rates, City dues, wagon hire, and other expenses, as well as merchants' profits, there is not so much left for the coal itself to the mineowner, prices at some of the Derbyshire pits are now from 6s. to 7s. per ton for large, good, and merchantable coal, and it is difficult to see how a profit can be made out of such prices, more especially when it is taken into consideration that a certain percentage of the coal raised has to be sold at from 1s. 3d. to 2s. 6d. per ton. Steam coal from Derbyshire and Notts has gone off tolerably well, all things considered, and it is not unlikely that in the course of the summer advantage will be taken of Boston for the shipment of it abroad. At present a good deal of dependence has to be placed on the ironworks and railway companies for the disposal of hard or steam coal, and it does not realise the price it ought to do, in consequence of there being no foreign or demand for shipment. Small coal, for engine and other purposes, has only been in moderate request, and does not above pay for getting, as a rule. Not so much coke is made in the county as could be desired, seeing that a good deal is absorbed at the iron furnaces, necessitating considerable importations, although the small could be easily converted into good coke, the same as is done in South Yorkshire, which actually supplies some parts of Derbyshire, although the colliery-owners in that county raise the same description of coal which is put into the ovens to the north of them, and which the ironmakers purchase.

Like most of other iron making districts, Derbyshire has felt the depression of trade as regards both pig and manufactured iron. The number of furnaces in blast is less than what it was previously, but the output is more than equal to the requirements. Not so much is being sent into Staffordshire or Lancashire, whilst prices, low as they are, look as if they will see a still lower point. The best brands of foundry pig sell at 40s. 6d. to 42s., and other qualities from 32s. to 38s. per ton. At the works engaged in the manufactured material the trade, with perhaps one or two exceptions, is quiet. The forges are by no means fully employed, although some of them have a high and general reputation for certain specialities in forgings. One or two of the largest of the foundries having a very old connection are doing tolerably well in pipes and other kinds of large castings for which they are noted. In light foundry material, such as grates, palisadings, ornamental stoves, &c., only a moderate business is being done. In some kinds of mining appliances, as well as in bridgework and girders, one establishment is said to be doing well. There is not much change to note with respect to the malleable iron department, one of the oldest of Derbyshire industries, carried on for a century at Dronfield by one firm, whilst a new establishment has sprung up within the last few years at Derby. A fair amount of business it is said is now being done at both of these establishments.

A little improvement has taken place in some of the Sheffield industries that have had rather a long season of quietness, but several of the lighter departments are still quiet. Government orders have been the means of finding employment for a considerable number of hands, even in some kinds of cutlery, as well as in heavier material. The two great companies, Brown's and Cammell's, are as busy as ever in armour-plates, and the contracts in hand will run a considerable time beyond the present year. More is also being done in ordinary plates for shipbuilding purposes, although steel plates are still to the front for the same object, and must ultimately supersede the former. Makers of steel have become more active, and some fair orders have recently been booked for Bessemer rails and other kinds of railway plant, and the requirements of spring steel have also increased. Some very heavy castings of steel are now being turned out in connection with machinery, and there is a fair absorption for wheels and axles as well. Makers of light agricultural implements are now fairly employed, as are those engaged in turning out light cutting machines, such as lawn mowers, and turnip and chaff cutters, but in heavy machines business is still of a moderate character. The foundries, without being busy, are kept fairly going, although the demand for casting for building purposes is not so heavy as usual at this time of the year, when the production has hitherto been the heaviest. The cutlery houses, with one or two exceptions, have not shown any material improvement of late, the American demand being much the same as during the last two or three months, but it is said that there is every appearance of a change for the better in some of the Irish and Continental markets taking place before long. File-makers are better employed than what they were, there being some good Government orders in hand, whilst the increased activity in the ship-building yards has helped forward the demand.

After some few disputes, mostly of a trivial nature, work has been resumed at most of the collieries in the West Riding; but this has brought no improvement, especially in the house coal trade. The demand for that description of fuel is very moderate indeed, but a tolerably fair tonnage has gone from two or three collieries, the proprietors of which sell direct to the London consumers; but this is principally done to keep up stocks, which had in some instances fallen to zero during the last month of the strike. Steam coal has gone off well, this being the busy time of the year for shipping to the North of Europe in particular from the Humber ports, at which there are agencies connected with several collieries in both South and West Yorkshire. To other districts in connection with iron-smelting a moderate tonnage has also been forwarded, but it will take some time to recover all the trade that was lost for the time during the strike. Small coal for manufacturers has not improved much of late, but the coke-ovens are now taking more, and this important branch of the coal trade is fast getting back to its old state again, there being a demand for all that is made, as the South Yorkshire coke now competes with the Durham for iron-smelting and steel-making.

TYNE AND WEAR.

June 18.—There is not much change in the general Coal Trade of this district. There is still a fair demand for the best steam coals, and also for steam small coals, bunker coals, &c. The house and gas coal trade is somewhat depressed at present. The shipments of coals and coke at Tyne Dock for the week were 108,064 tons, an increase of 8221 tons over the corresponding week of last year. The general imports and exports were also large.

THE USWORTH COLLIERY EXPLOSION—PROSECUTION OF THE MANAGERS.—This case was tried before a bench of magistrates at the County Court, Gateshead, on June 12, when A. S. Palmer, manager, and J. L. Morland, certificated manager, were charged with illegal shot-firing. Mr. Arnold Morley, M.P., barrister, appeared for the Crown, and Mr. R. W. Cooper appeared for the defendants. Mr. Morley said the prosecution was brought under section 51, sub-section 8 of the General Rules of Colliery Management. Sub-section 8 dealt with gunpowder blasting. The general rule provided that blasting should only be used under certain conditions during three months after any explosive gas had been found in the mine. The case was that gas had been found in the mine within three months previous to the firing of the shot, and the case depended upon whether the regulations contained in the Act had been so complied with as to protect the people. If gas issued so freely as to show a blue cap on the flame of the safety-lamp, powder should only be used in two cases. First, either in strong drift or stonework, or in sinking a shaft in which the ventilation was so managed that the return air from the point where the shot was fired passed into the main return air-course without passing a place in actual course of working, and the second when the persons ordinarily employed in that part of the mine were withdrawn. The prosecution contended that these regulations had not been complied with. It was also proved that gas had been found in that district a great number of times within three months from the firing of the shot: 42 men were employed on that side of the workings when the shot was fired, and four coal hewers and two putters are included in this number. For the defence Mr. Cooper contended that the meaning of the Act was that men ordinarily employed means the bulk of the hewers employed in the day-shift, and about 102 men and boys were employed in this case in the day-time. Mr. Cooper also contended that the discoveries of gas on which the prosecution relied were not fresh issues of gas from the coal face, but were owing to a temporary accident to the ventilation appliances. The case is a very important one, and it was put very fully before the Bench. At the conclusion, Mr. Morley said he had spoken with Mr. Cooper, and they agreed that it would be advisable to have the opinion of the Queen's Bench, so that the construction of the sub-section might be decided. The hearing was then adjourned until the case had been before a superior court.

THE BOILER EXPLOSION AT BOLDON COLLIERY.—An action was brought by a widow, Sarah Watson, on behalf of herself and two children, her husband having been killed by this explosion. The case was tried at the County Court, South Shields, last week. Her claim was under the Act, 198*l.*, three years earnings of her husband. The defendants stated that they did not know what caused the boiler to explode. The coroner's jury had found that the explosion was caused by a defect in the boiler. Mr. W. B. Campbell, an expert, was called, and he stated that he examined the boiler, and he produced a model showing the fracture. The plates were $\frac{3}{8}$ in. in thickness. The original plates were the Tudhoe Crown brand, and that iron was of good quality. The iron of the fractured plate was of a brittle nature, and bore no brand whatever, it had small fractures all over, showing it was not properly united in the manufacture. There were also fractures round the rivet holes, and the boiler had leaked for a considerable time. After hearing evidence at some length, that for the defendants being that the boiler was in good condition, the jury gave a verdict for the plaintiff for the full amount claimed, 98*l.* to be paid to Mrs. Watson, and 100*l.* to be invested for the children.

The Pig-Iron Trade continues very flat. There is no improvement whatever, but as the price has fallen to the cost of production it can scarcely fall further. If it does it will be imperative that the production should be greatly reduced. The shipments to Scotland have improved, but the foreign shipments continue small. The state of this trade at the present time, which affects so many trades depending to a great extent upon it, is almost exactly similar to its condition in 1879. Pig-iron at that time touched the lowest price ever known previously. It is hoped that an improvement will occur shortly, but there really is no immediate prospect of this occurring. Pig-iron has been sold No. 3 at 32s. 3d. per ton. It is evident that the foundry trade throughout the country is in a dull depressed state, as cokemakers report that they never experienced such a small demand for foundry coke.

The bad state of the Iron Trade generally is producing a like effect in the coke trade, as the inland trade is much depressed. There is still a good demand for shipment foreign. Unless the iron trade improves shortly the effect will be seriously felt in the coal and coke trades. Of course, the best coke works are still kept fairly well going, as they hold contracts which will run for some time to come, but when the time comes for renewing those contracts there will be much difficulty in securing renewed contracts at prices that will remunerate the coke makers unless a revival of the iron and kindred trades occurs in the meantime.

Many thousands of people assembled at Elswick Shipyard on Saturday to witness the first launch of a vessel built there—the twin screw torpedo cruiser built for the Austro-Hungary Navy by the Armstrong-Mitchell Company. The vessel, the Panther, is of 1500 tons displacement, about the same size as the "Scout class" in the British Navy. The engines are, however, much more powerful, and the speed will, of course, be much greater. Another similar vessel is considerably advanced here, and a larger protected

cruiser is also in progress. The first keel plates of H.M. Renown have also been laid, one of the largest ironclads yet built.

The proceedings at the Elswick Shipyard on Saturday were certainly very remarkable in the industrial history of the Tyne. The launch of the first ship built there and the fastening of the first bolt in H.M. ship Renown, which is to be built there, was a fitting occasion for the great concourse of people who assembled to witness the ceremony, and for the festive gathering that followed. It recalled the steady growth, the vast proportions, and the national importance of the great Elswick firms, which, as now amalgamated with Messrs. Mitchell and Co., occupy a position which certainly has no parallel in the country. The Elswick Ordnance Works alone have a world-wide fame, and this is comparatively now a small branch of the vast establishment.

SOUTH WALES.

June 18.—The Steam Coal Trade maintains its activity in a most remarkable manner, although it is probable that the highest point has been reached for the present. The Powell Duffryn Company have just secured a large Admiralty contract. At the meeting of the Sliding-Scale Committee last week the accountants reported that the condition of the books for the last four months as regards prices justified a reduction of 2½ per cent. on the workmen's wages, or 6d. in 1*l.* The total increase since 1879 has been 15 per cent., or 3s. in 1*l.*, so that the increase for the next four months will be only 12½ per cent. House coal is in better demand than usual at this time of year, and the patent fuel and small steam coal industries are both in a healthy condition. The amount sent away last week from Cardiff was 181,162 tons foreign and 20,000 coastwise, with 5381 tons patent fuel; Newport 32,028 tons foreign and 24,507 coastwise, with 1570 tons patent fuel; Swansea 20,825 tons foreign and about 11,000 coastwise, with 6280 tons patent fuel.

The coal sent by railway from South Wales to London in the month of May was not so large as usual. When the rates are reduced from their present high figure (8s. 4d. per ton) a good business may be done, and the Metropolis and the colliery proprietors will equally benefit. The Midland took 1400 tons last month from Aberdare, and some smaller quantities from Resolven and Quaker's Yard. The London and North-Western took 4000 tons from the Aberdare Iron Company, 1400 from Bwllfa, 2100 from Cwmdare, 1000 from Fforchaman, 500 from Resolven, and 500 from Aberdare Wayne's. The Great Northern carried 1800 from Aberdare, as well as some smaller quantities from Quaker's Yard, Hirwain, and Glyn Heath. The Great Western carried 4100 from the Aberdare Iron Company, 3500 from Bwllfa, 2600 from Fforchaman, 1200 from the Plymouth Iron Company, 2800 from Nixon's Navigation, 1700 from Ebbw Vale, 1600 from Hirwain Lower Craig, besides smaller quantities from Resolven, Mountain Ash, Cwmamman, and Merthyr Crawshay's.

The Tylacoch Collieries were re-started last month, after being closed since March in consequence of the insolvency of the proprietors.

Constant disputes are occurring in the Tin-Plate Trade owing to the isolated action of the men in accepting reductions. The only true remedy for low prices is a general stoppage of the works for one or two days a week, but there is no cohesion among the masters. Some of them will argue upon a price, and go away and sell immediately at a lower figure. The make is known to be too large, but the only practical remedy for such a state of things is not adopted.

The Iron and Steel Trades are a little healthier. Cardiff sent away last week 2950 tons. The arrivals of iron at Newport have amounted to 4480 tons from Bilbao, and 4370 from other places; Cardiff received 2544 tons from Bilbao, and 523 from other places.

LANCASHIRE.

June 18.—Business throughout both the Coal and the Iron Trades of this district is extremely dull, with very low prices ruling all through. In the iron trade, buying goes on slowly from hand to mouth, and makers have to be constantly seeking orders at the minimum rates. For the better class local and district brands the average figures are about 39s. to 39s. 6d., less 2½ delivered equal to Manchester; but there is Lincolnshire iron offering at as low as 37s. 6d. and 38s., less 2½. For the best brands of Middlesborough foundry 42s. 10d. net cash, delivered equal to Manchester, has been got on special sales during the week; but ordinary North Country brands are to be bought at 1s. to 1s. 6d. per ton under this figure. The firmer tone reported from Glasgow during the week has had no material effect upon the market here, and sellers of Scotch iron have been open to take quite as low prices as ever. In the manfactured iron trade rather more business seems to be stirring, and orders are reported to be coming forward a little more freely from some of the foreign markets. There is, however, no improvement in the demand generally to make itself appreciably felt in the market, and prices remain on the very low basis of 5*l.* 5s. to 5*l.* 7s. 6d. for good qualities of Lancashire and North Staffordshire bars delivered into the Manchester district. Brass founders and nut and bolt makers report trade as very quiet, with only small orders giving out from engineers, and prices cut down extremely low.

In the Engineering Trades tool-makers are kept fairly supplied with orders, but in other branches a slackening off is generally complained of; where activity is still maintained it is in finishing orders, which are not being replaced with new work, and the prospects for the future are far from encouraging.

The demand for all descriptions of coal is very dull, and collieries are either getting on to short time or accumulating stocks. A want of firmness characterises the market generally, and concessions on quoted rates are made to effect sales. House fire coals meet with a very slow sale, and apart from the natural effect of the season of the year upon the demand, it is evident that the resumption of trade at the Yorkshire collieries is making itself felt, and at some of the Lancashire pits orders have not been so scarce for a long time past as during the last week or so. Common round coals still meet with only a very poor demand for iron-making and steam purposes; engine classes of fuel are also in only indifferent demand, and supplies of slack are still plentiful. At the pit mouth prices average about 8s. to 8s. 6d.; for best Wigan Arley, 7s. to 7s. 6d.; for second qualities, 6s. 9d. to 7s. 3d.; Pemberton Four-feet, 5s. to 5s. 6d.; common round coal, 4s. 3d to 4s. 9d.; burgy, 3s. 6d. to 3s. 9d.; good slack, 2s. 6d. to 3s. per ton, common sorts.

Here and there collieries are occasionally kept busy with orders for shipment, but generally trade is only moderate, with good qualities of steam coal delivered at the High Level, Liverpool, or the Garston Docks, not averaging more than 7s. to 7s. 3d., and common to be got at about 6s. 9d. per ton.

FOREIGN MINING AND METALLURGY.

A meeting of forgemasters was held at Maubenge, on Saturday, to determine the extent to which production should be reduced, in view of the prevailing depression in affairs. The meeting was an important one, representing, as it did, 24 works, with an annual productive capacity of 450,000 tons, or more than half the annual production of the whole of France. A considerable contract for pig is stated to have been concluded by the Comptoir de Longwy with the Creusot Works at about 1*l.* 13s. per ton; so low a price would not have been accepted but for the necessity of reducing the rather considerable stocks of pig now on hand. The Orleans Railway Company has divided an order for 5000 wheels between the St. Etienne Steelworks Company (2500), the Fourchambault Company (1250), and the Ariege Metallurgical Company (1250). The house of Arbel has also received an order for 650 wheels from the Orleans Company. The Southern of France Railway Company has given Creusot an order for 1100 tons of steel fish-plates, at 6*l.* 16s. per ton delivered at Bordeaux. The Orleans Railway Company has let a contract for 8333 tons of rails to the French Steelworks Company at 5*l.* 3s. 2d. per ton. Prices have generally remained without change upon the German iron markets; the demand has been weak, and the competition for orders has been keen. A proposal has been made for the establishment of an ironmasters' syndicate for the whole of Germany. If the syndicate is formed it will be divided into four district groups.

Prices have continued to rule very low for all descriptions of iron upon the Belgian markets, but the low rates current have had the effect of stimulating the demand, and the great rolling-mills of the Charleroi district are fairly well occupied. One of the large makers of rolled iron in this district has indeed orders on hand to the amount of several thousand tons. Pig has shown weakness upon the Belgian markets in consequence of the severe competition of English and Luxembourg pig. English casting-pig has been quoted of late in Belgium at 1*l.* 17s. per ton, while Luxembourg pig has made 1*l.* 19s. 2d. per ton. Puddling-pig hard iron has been quoted at 1*l.* 18s. 4d. per ton; ordinary ditto, 1*l.* 15s. per ton; and mixed ditto, 1*l.* 12s. per ton. No. 1 iron for exportation has brought 4*l.* 6d. per ton; ditto on home account, 4*l.* 8s. per ton; ditto No. 2, 4*l.* 12s. per ton; ditto No. 3, 4*l.* 18s. per ton. Girders have made 5*l.* 12s. to 5*l.* 16s. per ton, No. 2 plates have made 5*l.* 10s. per ton for exportation and 5*l.* 12s. per ton on home account. No. 3 have brought 6*l.* 8s. per ton, while plates of commerce have continued to command a quotation of 8*l.* per ton. The Sclessin Company has obtained a rather important contract for bridge work in Roumania at 15*l.* 16s. 10d. per ton. The Hœrve Company has secured a contract at Utrecht for mild steel sleepers. The Herve-Wergifosse Collieries Company will pay on the 1st proximo a dividend of 16s. per share for 1884. The Northern of Spain Railway Company used 4615 tons of steel rails last year in connection with the maintenance of its permanent way. The length of line upon the system now laid with iron rails has been reduced to 154½ miles.

Contracts have just been set at Brussells for the supply of 358,200 tons of coal required for the Belgian State Railways. The results of the adjudication showed a rather sensible fall in prices as regards the Charleroi district, and a relatively good tone in the Liége district. A contract for the supply of 10,000 tons of briquettes has been taken by the Coal Agglomerates Company, at Châtebineau, at 10s. 7d. per ton. Prices have scarcely varied, upon the whole, upon the Belgian coal markets during the last few days. In the Couchant de Mons buyers have been making efforts to obtain somewhat easier terms, but they have not succeeded in doing so. There has been rather more demand for coke in Belgium, and stocks have declined slightly in some localities. The German coal trade has maintained much the same tone, and prices have scarcely varied. The imports of coal at Bremen during the last five years have been as follows:—1880, 3,527,124 hectolitres; 1881, 3,673,090 hectolitres; 1882, 3,769,455 hectolitres; 1883, 4,217,883 hectolitres; and 1884, 4,231,276 hectolitres. In these figures English coal figured for the following amounts:—1880, 3,201,118 hectolitres; 1881, 3,350,055 hectolitres; 1882, 3,443,513 hectolitres; 1883, 3,911,497 hectolitres; and 1884, 3,971,130 hectolitres. It will thus be seen that English coal has gained ground very appreciably at Bremen during the last five years. We learn from Dortmund that the Administration of the State Railways has concluded contracts for the supply of the coal and coke required upon the system in 1885-86. This has contributed to strengthen quotations, which had previously hardened in consquence of the conclusion of arrangements for a reduction of the constitution of a syndicate for regulating sales.

THE GLENROCK COMPANY (LIMITED).

The report of the directors states that upon the Glenrock estates "all mining operations have now been entirley closed, and nothing has transpired since the date of the directors' last circular (November 8, 1884) to raise the slightest hope that gold mining will ever revive in the Wynaad. Some of our neighbours ceasing to expect much from their Wynaad mines, have extended their operations to the Mysore district, where prospects appear to be brighter, and many of the Glenrock shareholders have expressed regret that this company do not take a similar step. The directors have felt that there is much in the argument that the shareholders care but little for agriculture, they all originally subscribed their capital for mining, and in mining they would probably wish to continue interested. The remaining capital, however, was not sufficient to make the best of their own properties and at the same time to commence gold mining in a new field. The directors therefore deemed it best first to secure the future of the estates and in the meanwhile to make enquiries for a suitable opening for the profitable employment of a small capital in gold mining elsewhere than in India. Such an opening appeared likely to be found in the Western States of the Argentine Republic and the directors, following with interest the operations of the West Argentine Gold Company in San Luis, requested Mr. Pinching, their late general manager, whose practical experience and technical knowledge render him pecularly fitted to undertake a rigid examination and advise as to the probable prospects of mining, to proceed to San Luis and examine and report in detail upon the district as a gold field With Mr. Pinching was associated Capt Blamey, who is known to the directors as a man of large experience in Australia and Colorado. Two of the directors also went out to judge for themselves of the reports that had been received. These gentleman, Colonel Howard and J. T. Hopwood, have returned from their visit to the district, a journey undertaken wholly at their own expense, and have reported favourably to the board. Mr. Pinching's report has also been received and the board, considering that it is worthy of the careful perusal of the shareholders, enclose a copy of the same, with an expression of their opinion that a meaure of co-operation between the two companies would probably prove advantageous to both. The Glenrock Company has power under its Articles of Association to engage in mining anywhere, and is possessed of large quantities of mining appliances—plants, tools, and stores, costing large sums of money, but now useless and unsaleable. The directors will be glad to receive the views of the shareholders on this matter, and invite expression of the same, and should it be favourable they will enter into negociations with the West Argentine Gold Company, with a view to the utilisation of such of their plant as can be conviently moved, and in others ways to acquire some interest for the Glenrock Company in this promising new gold district, which appears to possess the elements necessary for lucrative gold mining under comparatively easy conditions."

Meetings of Public Companies.

SANTA BARBARA GOLD MINING COMPANY.

The annual general meeting of shareholders was held at the offices of the company, in Liverpool, on June 5,

Mr. E. S. HOLLAND in the chair.

Mr. MOORE (the secretary) read the notice convening the meeting, and the report and statements of accounts were taken as read.

The directors' report was read, as follows:—

In presenting to the shareholders a report of the company's proceedings during the year ended 31st December, 1884, with audited statement of accounts for the same period, the directors have satisfaction in reporting the resumption of stoping operations in the bottom of the mine, which had been under suspension, since the crush of 17th May, 1882, rendered this part of the mine inaccessible. The communication between the deep workings south and the new shaft not having been effected, however, until the latter part of June, satisfactory returns were obtained in the second half of the year only. From this reason, and from the heavy outlay during the earlier months of the year, necessarily incurred in sinking the new shaft and opening out the mine in depth, the mine working account for 1884 shows a loss on the whole year's operations. The produce obtained during the year has been chiefly derived from the stope south of the No. 1 shaft in the bottom of the old mine, the mineral raised in the earlier part of the year from the lode above the adit, and from the stopes below the adit north of the No. 1 shaft, having been of somewhat inferior quality. The total quantity of mineral raised from the Pari Mine in the year 1884 amounted to 11,171 tons, as compared with 12,534 tons brought to surface in 1883, or a decrease of 1363 tons; of this quantity 2036 tons were rejected at the spalling floors as worthless stone, and 9135 tons, together with 24 tons of stone from the refuse heap at surface, in all 9159 tons, treated at the stamping mills, yielding 25,465 ozts. of amalgamated gold, or an average of 2·780 ozts. per ton of mineral stamped. Details of the operations in this department are given in the annual report of the reduction officer accompanying this report. The loss shown for the year on the mine working account, irrespective of the interest debited to the profit and loss account, is 2926*l.* 1s. 9d. The continued heavy outlay incurred in the sinking of the new shaft and for other underground works required for the proper development of the mine, with the comparatively small returns of produce during the first half of the year consequent on the limited extent of ore ground then available for stoping, has brought about this result. As pointed out in the manager's annual report, the operations during the second half of the year, owing to the resumption of stoping in the bottom of the old mine south, have been carried on at a profit. The rate of exchange for sterling in Brazil having shown a considerable fall during the past year, and continuing to be maintained at a low figure, the directors have considered it prudent to transfer a large portion of the credit balance shown on the year's operations in exchange account to stock of stores account, in order to provide for any depreciation in the sterling value of the company's stores at the mine that may have arisen from such fall in the rate of exchange. The sum charged to capital account for expenditure on new works during the past year has amounted to 338*l.* 14s. 10d. only, of which 323*l.* 0s. 8d. has been in respect of the new hauling machinery; a sum of 189*l.* 5s. 4d. has also been debited to capital for the balance of cost of shares in the Gaspar mineral rights, purchased by the company. In their last annual report the directors alluded to the satisfactory completion of the pumping machinery, which enabled the water to be pumped out of the old mine to a depth of 50 fathoms below the deep adit. This was accomplished by the 16th of February last, and since then the machinery has continued to work well. The hauling machinery was likewise completed in April last, and has worked satisfactorily. The skip can now be raised from the 50 to the adit level in 1½ minute. Seeing that the mine appears to be once more in a position to yield steady and remunerative returns, with every prospect of improvement, the directors have laid under consideration the position of the profit and loss account, which shows an adverse balance of 14,245*l.* 12s. 5d. at the 31st of December last. This large debit balance it may be explained, is largely due to the cost of sinking the new shaft and opening out the mine anew, the whole expenditure on which has been charged to the mine working account, and not, as in the case of the outlay on the new machinery and new works at surface, debited to capital account. The directors have decided to transfer the balance standing at the credit of premium account, being the amount of premiums received on shares—10,836*l.* 7s. 6d., and also the reserve fund of 3000*l.*, together 13,836*l.* 7s. 6d. to profit and loss account, thus reducing the debit balance of that account to 409*l.* 4s. 11d. The reduction by means of this transfer of the adverse balance shown in the profit and loss account to the comparatively small sum of 409*l.* 4s. 11d., will facilitate the early resumption of dividends to the shareholders, when the returns from the mine are such as to warrant a distribution of profits. The annual report and table of statistics of the superintendent at Pari, with the report of the mine captain, and those of the other departmental officers, which accompany this report, give the details of the operations at the mine during the year. A plan and longitudinal section of the mine, showing the ground excavated during the year 1884, alluded to in the mine captain's report accompanies this report. From the report of the mine captain it will be seen that the new shaft (Holland's) has been sunk during the year 24 fms. 4 ft., making its total depth below the deep adit at 31st December last, 74 fms. 4 ft. The lode in this shaft has varied in sinking from 6 to 8 ft. in width, but it is as yet of little value for the stamping mills. The communication between the new shaft and the old mine at the 50, was effected in the month of February, 1884, and since that date regular workings have been carried on in the deeper part of the mine. The directors have pleasure in again expressing their satisfaction with Mr. Treloar's management at Pari during the year, and express their recognition of the efficient manner in which he has carried out the completion of the new works and the re-opening of the mine. It is with much regret that the directors have to announce the decease, in December last, of Mr. C. Frederick Carne, who had been identified for so many years past with the company. Mr. Carne, on account of his advanced years, had resigned his seat at the board shortly before his decease, and the directors filled the vacancy by the election of Mr. William G. Holland as a director. The directors retiring on this occasion are Mr, Thomas Tregellas Mr. William G. Holland, who are eligible, and offer themselves for re-election. The auditor, Mr. A. W. Chalmers, likewise retires, and offers himself for re-election.

The CHAIRMAN, in moving the adoption of the directors' report and statement of accounts, gave explanations as to the meeting being held somewhat later than usual, which had arisen from his absence abroad, on account of the weak state of his health. They would see that in the first paragraph of the report the directors congratulated the shareholders on operations having been resumed in the deeper part of the mine, after a lapse of some three years, since the crush of May, 1882, rendered this part of the mine inaccesible. This was indeed a matter of importance; for, if the shareholders would refer to the sketch forwarded to them along with the report, they might observe what a large amount of ore ground could be opened up under the old mine workings, which ought to give satisfactory results henceforth. Looking at the results for the past year, although an excess of expenditure amounting to some 4000*l.*, was shown on the operations—which, however, included the debenture interest of 1000*l.*—it should be recollected that the heavy expenditure in continuing the sinking of the new shaft with the utmost dispatch, and in opening out the mine anew, had all been charged to revenue account; the small sum of 338*l.* in respect of new works having alone been placed to capital account. This, he considered, was not an unsatisfactory result therefore, bearing these circumstances in mind. He thought that Mr. Treloar's and the several departmental officers' reports gave the fullest information regarding the operations during the past year, and the present position of the works at the mine. The sketch received from the mine captain showed the works underground, and the rough tracing which was on the office wall would show the manner in which the lode was being worked on at the 80 fm. level, which depth, he was happy to say, the new shaft had now attained. The mine should now be in a position to show profitable results—the early realisation of which had been somewhat interfered with in the beginning of the current year by the floods, of which they already had full particulars given them in the usual monthly circular. They were now, however, in a better position at the mine, and Mr. Treloar's letter, received on the 1st of June, referred to their prospects for the month of May as being good, since a fair supply of mineral was once more available from the deeper part of the mine, and that he expected there would be a proper supply henceforth kept up for all the stamping mills. Generally speaking, he now thought their prospects were most satisfactory, and he anticipated steady and increasing profits for the future. Regarding the adverse balance of some 14,000*l.* that stood at the debit of profit and loss account, and the proposed reduction of such to the small sum of about 400*l.* by means of a transfer of the amounts received from premiums on shares issued, and of the amount of the reserve fund, the directors considered this an advisable method of getting rid of this balance, since the premiums on shares and the reserve fund were very properly applicable to such a purpose. As they already might be aware, a great portion of this debit balance of profit and loss had arisen from the great cost of sinking the new shaft, and of other necessary works to open out a new mine as it were. The shareholders would share the regret of the directors at the decease of Mr. C. Frederick Carne, who had been for so long connected with the concern. Mr. Carne's place at the board, which he had resigned some little time previous to his decease, had been filled up by the election of Mr. W.G. Holland, who was a representative of a very large interest in the company. He concluded by formally moving that the directors' report and statement of accounts for the year ending Dec. 31, 1884, be received and adopted.

Mr. JAMES H. DENNIS seconded the resolution.

Mr. KENDALL asked for some information regarding the English expenses, which seemed to him to be high for so small a concern.

Mr. GARNETT thought that now the new shaft had reached a considerable depth the expenditure at the mine was likely to show some diminution.

The CHAIRMAN, in reply to Mr. KENDALL'S remarks, pointed out that a considerable proportion of the English expenses arose from commission and bank commission, over which the management had no control. The remuneration of the directors had been approved by the shareholders, and if it was thought too high it was for them to move in the matter; but for his part he considered it a fair sum, looking at the labour that had devolved on the management in England during the past two or three years owing to the unfavourable position of matters at the mine. The directors, though credited with their remuneration, had not drawn all their fees, nor did they intend to do so until the finances of the company permitted of these being paid. The office rent was very small, and on the whole he was of opinion that the expenses were moderate in comparison with those of other mining concerns with which he had been acquainted. In regard to what had been appropriately said by Mr. Garnett respecting the expenses at the mine, he hoped that it might not be necessary to continue to spend quite so much in deepening the new shaft; but speaking generally it was desirable to develope the mine with proper speed, and to keep their staff of men fully employed on such works.

Mr. WILLIAMSON enquired what amount of stone it was anticipated could be raised monthly at the mine, and what the present stamping power amounted to? If an average of only 3 oits. per ton was obtained this on 1000 tons of mineral treated each month would not leave much profit.——The CHAIRMAN thought they were justified from past experience in taking 3½ oits. per ton as a safe basis for the average yield of the ore, and this on even 1000 tons per month, which seemed available now, should leave a fair profit. He hoped, however, for better results than these, and Mr. Treloar had stated that in a comparatively short time the mine should be capable of yielding fully 2000*l.* worth of gold per month, which would of course leave a good profit. He understood their stamping-mills were capable of treating some 1500 tons of ore per month.

Mr. FLETCHER (director) would remark that Mr. Treloar had also stated that he did not expect the expenses to run much higher than 1200*l.* per month when he was taking out the increased produce of 2000*l.* value.

In the course of the further discussion, Mr. PENN referred to the time it had taken to reach the deeper workings in the mine, which had exceeded the estimate of two years; it had been stated that the crush which had happened in 1882 would in the end prove a blessing. Was this likely to be so?——Mr. DENNIS (director) said that in consequence of the crush the directors had been induced to undertake works that they might perhaps not otherwise have had the courage to do at the time—to sink a good shaft in safe ground, through which shaft the future mining operations could be carried on, and this would no doubt prove of the greatest advantage.

Mr. GARNETT remarked that during the years that the company had made profits they amounted he believed to an average of about 11 per cent. on the capital. Was a similar rate of profit likely to be realised in the future? That would be about 4500*l.* per annum profit he calculated. Were the new works for the additional waterpower completed?——The CHAIRMAN said he looked for better results than those Mr. Garnett referred to. His own impression was that when time had been given for opening out the new mine the profits ought to reach fully double what Mr. Garnett had named; in his opinion they should reach 9000*l.* a year. If the output increased very much it might be well to commence the erection of a new stamping-mill. The works for the new water supply were completed. The company had now issued all its capital, the remaining 8000 shares having been subscribed for at a premium of 5*s.* per share during the past year, and it was a satisfactory feature that several hundreds of these shares had been taken up by the employees at the mine, which said much as to their faith in the property out there.

The resolution was then put to the vote, and carried unanimously.

Resolutions were likewise passed unanimously re-electing Messrs. T. Tregellas and W. G. Holland as directors, and Mr. A. W. Chalmers as auditor.

On the motion of the CHAIRMAN, who spoke of the energetic manner in which Mr. Treloar continued to conduct operations at the mine, a hearty vote of thanks was accorded to the latter and the staff at Pari, for their exertions in the interest of the shareholders.

The proceedings terminated with the usual complimentary vote to the Chairman and directors.

THE RUBY AND DUNDERBERG CONSOLIDATED MINING COMPANY, 1885 (LIMITED).

The first ordinary general meeting of shareholders was held at the Cannon-street Hotel, on Tuesday,

Mr. GEORGE HEIRON in the chair.

Mr. J. FORSTER HAMILTON (the secretary) read the notice calling the meeting.

The CHAIRMAN said this was a statutory meeting held in compliance with the requirements of the Act of Parliament, which required the directors to call a meeting before four months had expired from the time of the formation of the company. In reality there was very little business to be done except, as stated in the notice calling the meeting, to elect two auditors for the ensuing year. He was happy to say that the reconstruction of this company was, perhaps, the most successful reconstruction ever known; for when the directors sent out the notices inviting applications for shares, not only was the full amount subscribed for very readily, but a much larger number was applied for than the directors could supply. Therefore, it could be said, and said with truth, that a more successful reconstruction of a company had never taken place, especially considering all the circumstances and difficulties which surrounded it. (Hear, hear.) At the succeeding board meeting which was held after the reconstruction took place, the directors were advised by Mr. Reuben Rickard, the engineer of the company, who was then in England, that if we only adopted a certain course in the development of the mine we were almost certain to meet with success. Mr. Rickard was a well-known mining expert, and the directors had had confirmation of his experience and views, and to a certain extent were acting under his advice. Mr. Rickard assured them that if they only developed this property in a miner-like manner, and with the capital they had at command, they might hope for very pleasing success. Mining, as the shareholders were aware, after all was mining; at the same time the elements associated with this property were such that the directors could not feel otherwise than almost certain that they would meet with success. Following on the success of the reconstruction came the application for a Stock Exchange settlement and official quotation, and he was happy to say the board succeeded in obtaining both. So far no effort had been spared on the part of the directors, and nothing had been withheld in any shape or form. The next matter which he had to notice particularly was that the chief amount of the new capital subscribed for the reconstruction was, he was happy to say, lodged in the bank on deposit at call. They had scarcely had to send out 1*s.* to the other side.

Mr. BLADON: Nothing at all yet.

The CHAIRMAN: The mine had spared them so far, and it showed as satisfactory a state of business as it was possible for any mine to show; because as a rule there were large claims from a mine directly money was obtained, and money had to be sent out for some purpose or another. The directors intended, under the advice of Mr. Rickard, to develope the mine in such a manner as, he thought, justified them in hoping for and anticipating good results. The recent cablegrams from the other side which had been published were rather of a meagre character, but the directors did not intend to open up the mine yet, as they had to make certain regulations and establish certain rules; therefore, they had not as yet attempted to open up the mine other than in the ordinary sense, but in another month or two they would expect better results, and if they did not get them the directors would be disappointed. But up to the present time they had not gone for them, but they had gone for providing the machinery, so as now to commence operations, and with the money which they had at command and at the bank, he had no hesitation in believing that the results would prove most satisfactory to all the shareholders as well as the directors. (Hear, hear.) The company commenced on the 1st January, and the accounts would be made up to the end of December in each year. The first meeting (for it would really be the first) would be held in April next, and the half-yearly meeting in October, each succeeding year. The Miners' Union out there had given them some trouble in connection with wages, and the company had had to pay $4 a day; but there had been means adopted by which the Miners' Union had to a certain extent been broken up, and some miners had been lodged in jail until it was decided; and if it was decided favourably to the employers, then this company would be able to employ the men at a much less rate than they had hitherto paid. He did not think he had anything more particularly to say. The only business was the election of auditors; but, as regarded the mine itself, the directors had every faith that if it was developed in a proper miner-like way success was before the company. He would ask the secretary to read the latest report from the mine; the shareholders would, he was sure, like to hear it, because it would place them in possession of the latest information. (Hear, hear.)

The SECRETARY then read the report.

The CHAIRMAN said a special report, which was somewhat longer, had also been received, and he would ask the secretary to read it.

The SECRETARY read the report, and also the latest telegram.

The CHAIRMAN: When we attempted this reconstruction we intimated it was probable we should require a call in four months. I am happy to say we shall not have a call for another four months, and I hope we shall not want a call at all. (Hear, hear.) At any rate for three or four months we do not anticipate a call, unless we develope upon a larger scale. The interest was paid upon the debentures at the end of the year, and the debenture interest which will accrue on the 1st July will be paid in shares.

Mr. BLADON said that on the present occasion the directors had not, it was true, any results to bring before the shareholders; still, as he had taken a somewhat active part in the reconstruction of the company, probably they might expect him to make a few remarks with regard to not only what passed during the reconstruction, but also regarding the probabilities of the future. (Hear, hear.) The Chairman had informed them that the entire number of shares had been taken up, the effect of which was that they had a working capital of 25,000*l.* The 1*s.* per share alone had produced 5000*l.*, out of which they had met the interest on the debentures up to the 31st December last, which was to be payable in cash, and which had practically absorbed nearly 1300*l.* out of the 5000*l.* They had also to meet, which they had not yet done, the necessary legal expenses connected with the reconstruction, which they could not expect to be light, because the directors had had, with the assistance of the solicitor, to carry through a large and expensive problem, and also had to arrange with the debenture-holders. All these were matters purely unavoidable; but, at the same time, the directors fairly faced the position, and the debentures would be ready in a week from the present date, and, therefore, in time for the holders to bring forward their coupons, and get in exchange fully paid shares. On this matter of the debentures he might make a distinct statement. Under the debenture scheme during the first three years the directors had the option, should they think proper to exercise it—and they would do so unless there were profits available, for they did not intend that all the amount of the working capital should be drained in future (hear, hear)—they had the option practically to pay in shares the interest on the debentures for three years. Therefore, the shareholders might consider their situation a sound one, and the money entrusted to the directors would not be used unless there were profits available. If there were profits available the value of the shares would have attained such a fair price that in that case the debenture holders would exercise their option and refuse to take the cash—in other words, they would take fully paid shares. Therefore, the position of the directors and shareholders as regarded the working capital was perfectly safe; they would only use the money in payment of interest if they had earned profits, and if they earned profits the debenture holders would take the shares, and the company would have the money to build up a reserve. (Hear, hear.) It must be extremely satisfactory to the shareholders to hear what the Chairman had told them—that in spite of all these facts they had cash at command which rendered the company perfectly safe as far as they could see for the next few months; therefore, during that time they could not expect to require a call, but they might attain success in the way they had looked forward to, and in that case the profits would be available for working capital for the time being. Up to the present time they had earned about 500*l.* clear profit, after paying all expenses at the mine. That alone afforded a very satisfactory item; it was the first time in the history of the company that the directors had been able to make such a statement. (Cheers.) The directors had also had many personal interviews with Mr. Reuben Rickard, and they would be glad to know that Mr. Rickard was extremely sanguine as regarded the future, and believed he would be able to produce satisfactory results upon a minimum of expenditure. What the directors had endeavoured to impress upon Mr. Reuben Rickard was this—that although they were entrusted with ample working capital still they would not allow that working capital to be frittered away in any direction not likely to produce satisfactory results; at the same time they must not limit the expenditure except in a fair working manner, as it was only by extending mining operations that they could hope to obtain satisfactory results. They had commenced on the Home Ticket Mine, and would join it to the Dunderberg; so, in an economical manner, the directors were doing the best they could to produce results. Without committing himself to a definite statement he thought they might look forward with hope and confidence to the future. (Hear, hear.)

The CHAIRMAN said, in reply to Mr. HIRST, the quality of the ore was from $30 to $100 per ton.

Mr. CLIPPERTON moved that Mr. R. Mackay and Mr. W. Russell Crowe be appointed auditors, at a fee of 15 guineas each.

Mr. SUTTON said he did not think it necessary to have two auditors, and by having only one they would save some expense. He had every confidence that Mr. Mackay alone would thoroughly audit the accounts.

The CHAIRMAN said that Mr. Mackay was originally auditor at a remuneration of 25 guineas, and it was suggested from the shareholders' side of the table that a second auditor, holding a stake in the company, was desirable in the interests of the shareholders.

Mr. SNELL said that he himself at a previous meeting proposed Mr. Crowe as second auditor provided the expenses were not increased, and Mr. Mackay agreed to this, and he proposed it because he thought this was a company in which a shareholder having a large interest should be an auditor. (Hear, hear.)

Mr. SUTTON said that after this explanation he would withdraw his opposition, and should be happy to second the resolution.

The resolution was then put and carried unanimously.

On the motion of Mr. BOLTON, sen. (who expressed his confidence in the future of the mine), seconded by Mr. CLIPPERTON, a cordial vote of thanks was passed to the Chairman and directors, and the proceedings terminated.

A meeting of the Accidents in Mines Commission was held on Tuesday and Wednesday at its offices, 2, Victoria-street, Westminster. There were present the Chairman, Mr. Warington W. Smyth, F.R.S., Sir Frederick Abel, C.B., F.R.S., Mr. Thomas Burt, M.P., Mr. W. Thomas Lewis, Mr. Lindsay Wood, and the secretary (Mr. Arthur J. Williams).

A NEW EXPLOSIVE.—A Swedish engineer, Herr Sjoberg, has produced a new explosive, which he calls romite, and with which experiments have just been made at the fortress of Waxholm. The manufacturer claims that the explosive may be manufactured without any elaborate machinery; that it cannot explode even when closely confined, except when ignited; and that it cannot freeze; while its strength is very great, and its cost small. The experiments carried out were with a breechloader discharging shells to a distance of 1090 yards, all the shells exploding with great effect, whilst the blasting operations were entirely successful. A number of engineers and military officials witnessed the experiments, which were declared highly satisfactory.—*Iron.*

THE NEW POTOSI COMPANY (LIMITED).

The second ordinary general meeting of shareholders was held at the Cannon-street Hotel, on Monday.

Mr. E. L. J. RIDSDALE in the chair.

Mr. J. BRYCE WILKINSON (the secretary) read the notice calling the meeting. The report and accounts were taken as read.

The CHAIRMAN moved that the report of the directors, and the balance-sheet to the 31st December last, be received and adopted.——Mr. SOMES seconded the motion.

The CHAIRMAN said that during the 11 months they had crushed 7106 tons of quartz, which had produced 8657 ozs. of pure gold, which had realised 32,680*l.* It would have been better, perhaps, if the balance-sheet had been presented in a less complicated form. He did not like the form in which it was drawn up; but in consequence of the old company's affairs having been wound-up, and the reconstruction of the old company, it was thought better to put the revenue account and the balance-sheet on one sheet. He would go through some of the figures, and then give the financial position of the company at the present time, and discuss the reason why the directors asked for more capital. The amount of new capital issued had been 279,142*l.* 13*s.* There were further shares still held, to be given to the old shareholders when they came in. There were a few outstanding shareholders in the old company who had not come in, and they amounted to 1815*l.*, leaving 19,042*l.* 7*s.* more to be raised on account of the share capital. That represented the free assets, in the shape of calls, which the company had on the 31st December last. Next they came to the "liabilities." They had bills payable 12,116*l.* 8*s.*, and sundry creditors in London and Potosi, estimated at 8098*l.* 0*s.* 11*d.*, making 20,214*l.* 8*s.* 11*d.*, which was a formidable figure to look at; but when he showed them what it consisted of they would consider that the formidable nature of the account would disappear. In working the mine, when sending gold home, they were obliged to pay the expenses of raising the gold in bills drawn in Venezuela and accepted in this country, and, therefore, they had always a large amount of assets and liabilities in transit between this country and Venezuela. Against the bills payable they would see, on the other side of the accounts, gold in transit (sold since the 31st December), 11,972*l.* 9*s.*, which about balanced the bills payable. Then, as to sundry creditors in London and Potosi, estimated at 8028*l.* 0*s.* 11*d.*, they had cash in hand 2887*l.* 4*s.* 7*d.*, and estimated value of stores, &c., on hand at Potosi 5560*l.*, which wiped out that liability; and that left a liability on the shares of 19,043*l.*, which the directors had always looked upon as a reserve, but which the unfortunate fact of their having encountered a dyke in the mine had obliged them to call up. They had paid for the property taken over from the old company 244,992*l.* 0*s.* 2*d.*; they had lost on realisation of assets taken over from the old company 1036*l.* 2*s.* 5*d.*, which was owing to a small loss on the shares in the Chile Company, which were taken over in part payment for some shafts in the old Potosi Company, and which shares were sold at 10*s.* each. There was the cash at the mine, 2440*l.* 19*s.* 11*d.*, and they might value the stores at Potosi at 5560*l.* The expenses in London had been 1747*l.* 13*s.* 6*d.*; and he thought, if they considered they had wound up one company and reconstructed the new company, they would not look upon those figures as at all out of the way. Included in that was 650*l.* for directors' fees, which was half the amount which the directors were enabled to draw under the Articles of Association; the other half had been left until the company was in a dividend-paying condition. The amount debited to the mines for remittances, machinery, stores, &c., was 65,656*l.* 7*s.* 5*d.*, and the estimated amount owing at Potosi 8000*l.*—he would put the amounts at the worst position as they stood in the accounts—and those two amounts together made 73,656*l.* 7*s.* 5*d.*, although there were sundry assets which might be charged against them. The directors had sent out rock-drills and other machinery, and there was the cost of sending out and erecting the drills and other machinery, together with the heavy duty which the company had to pay; altogether this might be estimated at about 5000*l.*, and if this were deducted from the 73,656*l.* 7*s.* 5*d.*, it would leave 68,656*l.*, or about 6000*l.* a month for the working expenses of the mine. That was a large amount, and it was what he had to explain to the shareholders to-day. About a year and a-half ago an arrangement was made that Mr. Thomas B. Provis should have the management of the mine here; his brother, Mr. John Provis, resided at the mine and took the management there, and it was considered that it would be an advantage to have Mr. Provis going out every six months, revising what his brother had done, and the company would have the advantage of two practical engineers keeping the expenses down to the lowest possible point. He was sorry the expenses had not been kept down, because for eight months Mr. John Provis would persist in working three mines. He was working in the Peru shaft, he was working in the main shaft, or Atwood's shaft, and he was also working at Scriven's shaft. He wished, of course, to develope the mine quickly and get a pay-shoot. The directors found that method of working was very expensive, and last September Mr. Thomas Provis arrested that, and got the workmen concentrated upon Scriven's shaft. The expenses were too large, whilst the output of gold was so small. It was expended chiefly in working the points he had named and stoping out a mass of ground. The ground was very seductive, now showing rich patches and then going off again. When Mr. Thomas Provis went out in September he stopped that work, and ordered the whole concentration to be at Scriven's shaft, which the directors always wished to be done. There was no doubt they had a pay-shoot 120 ft. long in the Scriven's shaft; but the shaft being very small, only 6 ft. by 4 ft., made it very hard to supply the mills with quartz. At any rate, when Mr. Thomas Provis got out, the returns got to 1771 ozs. in October; in November they got to 2311 ozs., and if they took the working expenses at the very worst at 6000*l.* a month, they would see it was a positive fact that, just at the end of November, the mine was making a clear profit of 34,800*l.* per annum. But whilst the quartz was being extracted they came all at once upon this unfortunate dyke, as hard as jasper, and, no doubt, a volcanic and eruptive rock. Of course, the manager could not, at that time, tell how high or how thick it was, and for the time being there was an end of the vein, and they could see nothing. The manager began to drive a level through it, taking out during December and January stuff on the opened side of the dyke to keep the mill going whilst he was driving through. They could not tell what to expect on the other side of the dyke; but he was happy to say that when the level was driven through they found the ore standing as rich as before. The quartz was taken away and carried through a small level up to the mill. In February they got out all they could on that side, and in March and April they found it impossible to work through that small aperture, and supply the mill with 1000 tons a month. The shareholders would remember that in March and April the mill only ran half time, because it was impossible to get the quartz rock through the small aperture in this dyke. In addition, the ventilation was so bad that the miners could not work, and it was necessary to put down another shaft. The directors had always looked upon the calls as a resource in case of difficulty, and they never dreamed of having to call upon the shareholders to use that amount for a case of this kind. But it was absolutely necessary for them to do so. They were obliged to put down that shaft, and, therefore, as soon as they knew the situation they put down the shaft at once, and got ventilation; and by the last letter received from Mr. John Provis he said he was down with the new shaft, and in about 14 days would communicate with the level; so the directors hoped Mr. John Provis was now getting the quartz out for the mill. That was not all. Not only were we driving through this dyke, but whilst the shaft was being sunk we had to shut up the mill; and, of course, they could not dismiss the staff, and the staff was kept together through June and part of July whilst the shaft was going down; and if they took the expenses at 6000*l.* a month, which was the worst they could be put at, for the four months of January, February, March, and April, that would give 24,000*l.*, which had to be met, and during that time they extracted 14,000*l.* of bar gold, which would leave just 10,000*l.* to make up out of calls. During May, June, and part of July, putting down the expenses at 4000*l.* a month, as the mill was not running, that would come to about 12,000*l.*, or about 22,000*l.* alto-

gether. That 22,000*l.* was practically the cost of the dyke in the mine, and the only good they had got out of it was that it had obliged them to put down a new shaft, which would be valuable in time to ventilate the mine, and replace the other shaft, which was small. The directors had to justify the asking for fresh capital. He had shown them that all this had swallowed up the amount he had mentioned, and there were the expenses of putting down the new shaft, and the financial position was that when all the calls were made there would be left about 1700*l.* in hand. He might mention that all the liabilities were paid at the mine. The letter which came in on the 9th from Mr. John Provis stated that the liabilities were practically *nil*. These were the facts which justified the directors in asking for the sanction of the shareholders to the raising of fresh capital. The shareholders would have seen from the report that Mr. Thomas Provis had considered that the state of his health would prevent his acting any longer as general manager, and his brother would leave with him. The directors had entered into an arrangement with Mr. Jewell, who had been well recommended as thoroughly aquainted with the working of gold mines, and whose testimonials were admirable. The directors had dispatched Mr. Jewell to the mines. He went out on the 2nd June, and would take over the mines from Mr. John Provis. As to the new capital, that had better be discussed at the extraordinary meeting, which will be held on the completion of the business of the ordinary meeting. Some might object to the large increase which it might appear to be in the capital of the company; but the shareholders were aware that the capital of the company was comparatively small before. It was 300,000*l.* He had shown them by figures which were incontrovertible that last November they were making at the rate of 38,000*l.* per annum profit on the mine, and had it not been for this accident they might have gone on making those profits. (Hear, hear.) Calls were unpleasant things to make; but he hoped the shareholders would consider, from the explanations given to-day, that this was a matter which no board of directors could have under control. The directors had done the best they could. They might have raised money on debentures, but it was an unsatisfactory way, and it was best to have the ordinary share capital unhampered; and though they were increasing the capital to-day that capital would only be issued when the necessity of the case required it.

Mr. HENRY said he was informed that Mr. Jewell had been a carpenter in the Chile Mine, and had been turned out for misconduct.

The CHAIRMAN said the hon. shareholder must have been misinformed, and that it must have been another man with the same name. The directors had the highest testimonials with Mr. Jewell, and he was selected, after the most careful enquiry, from about 20 applicants.

Mr. HENRY: What wages do you give him?——The CHAIRMAN: 800*l.* a year. The engagement is limited in the first instance to four months, the directors having the option of continuing the agreement for three years if Mr. Jewell gives satisfaction.

Major SCRIVEN said this Mr. Jewell was not the Mr. Jewell alluded to by the shareholder. Previous to coming to this company Mr. Jewell had been manager of the Aruba Mine.

Mr. BLADON said the great point to ascertain was the satisfactory point which the Chairman had stated—that the engagement was a limited one. He thought the shareholders must have been greviously disappointed at the mistakes which had been made in the past. The managers had been either incapable or extravagant beyond conception. He knew the difficulty of keeping a check upon expenditure, but the only real check they could have was that the engagement should be such that at the expiration of a limited period they could recall the manager. It was very unsatisfactory when managers did not send home proper vouchers and proper accounts. In some companies directors had mines sprung upon them in that respect, and had to face a large amount of liability of which they had no cognisance before. In saying this he was not making any special charge against any gentleman appointed by this company, but he did say that this company had not been properly served with regard to the vouchers and accounts sent home. Unless they limited their expenditure in a proper way they would not get the value of their money. It was so recently that this company was reconstructed that he was sorry the directors had to come forward again and ask for fresh capital. There were two courses—one to allow the company to go into liquidation—("No, no")—or to attempt to rescue it. (Hear, hear.) No board had a right to say that they had no scheme of reconstruction, and he was pleased that the directors had had the courage to come before the shareholders and ask for an increase of capital. It seemed hard for the shareholders to have to find more money, but if they were courageous now they would hereafter find the benefit of taking up an additional number of shares. At the special meeting he should have two suggestions to throw out. For his own part he should be prepared to take up more than his proportion of the new shares, and he hoped the entire number would be taken at once. He pointed out the excellent financial position in which the company would be placed if this were done, and pointed out that a moderate success only was essential for paying a handsome dividend upon that amount.

Mr. SOWERBY said that in 1884 it was stated they were through the dyke or slide.

Mr. THOMAS B. PROVIS said that when that statement was made they had not become fully acquainted with the thickness of the slide. They had driven about 6 ft. through the slide, and came on some quartz about 8 ft. wide; but on driving further they again came to the hard slide, and had 34 ft. more of hard rock to go through. But they were now on the lode proper, and about 130 ft. beyond the slide, so there was no chance of any further slide in this portion of the mine.

Mr. G. S. SIMPSON, after thanking the Chairman for his able and clear speech, said he should like to know what the slide had cost the company altogether? He suggested that the report should be sent out earlier, and also that the names of the directors should be affixed.

The CHAIRMAN said that non-affixing of the names was entirely an oversight, and they should be given in future. As to the report, it was not sent out earlier because the directors were waiting for the balance-sheet. As to the dyke, he estimated, as he stated in his speech, that it had cost the company altogether about 22,000*l.*

Mr. E. D. MATHEWS (a director), said that if the property continued to be managed as it had been by Mr. Fitzgerald, they might as well wind-up. It would be remembered that at a previous meeting he took the lead against Mr. Fitzgerald, and was afterwards appointed on the board. When he got into the board-room he found that an arrangement had been made with Mr. Provis for three years. He had great hopes that the Provis management would be a great success. He saw Mr. John Provis before he went out, and the strictest instructions were given to him to be economical in his work, and Mr. Provis was told fully the position of the company, and how there had been received from the tired shareholders a large amount of money which they had subscribed for the purpose of carrying on the mine, and Mr. Provis and his brother were told how jealous they should be in that expenditure of that money. After a time he (Mr. Mathews) was not content with the result, and on that point he had been somewhat, in a measure, in opposition to the board, but he waited quietly. In September it became Mr. Thomas Provis's turn of duty to go to the mine, and he hoped something better would be done when Mr. Thomas Provis got there, and that he would have said to his brother—"You are not doing right; a stop should be put to extravagant expenditure." The directors waited, hoping that Mr. Thomas Provis would reduce the expenditure. Mr. Thomas Provis arrived home in March, and the directors awaited his report about the expenditure and management, and since his return the directors had taken steps to make a change. As to Mr. Jewell, he was selected out of 28 applicants, and was formerly employed by the Aruba Company, and the directors had received the highest recommendations with him; his salary was one-third the amount which had been paid to the previous managers, but he would receive a commission on the profits. (Hear, hear.) The shareholders had a positive proof that they had a mine, because there were about 2000 ozs. of gold got in one month, and if the shareholders would provide this capital he believed they would find that this mine was one of the best properties in Venezuela.

Major SCRIVEN (a director), referring to the expenditure, said the Chairman had given the expenditure at 72,000*l.*, but it should be borne in mind that that included the crushing of a great quantity of quartz, which had produced 32,000*l.* worth of gold. During the time the expenditure was heaviest the three months included the purchase and erection of rock-drills, and they made a profit over the total expenditure of 1200*l.* or 1500*l.* Had they not crushed they would not have got the 32,000*l.* towards paying the 72,000*l.* It was still a question with him whether that was a wise step or not.

Mr. THOMAS B. PROVIS (general manager) said he would not enter into any controversy with Mr. Mathews; 18 months ago they were told they had no lode, but he (Mr. Provis) reported 12 months ago that they had a lode, but that it was not developed. At the time he and his brother had to go out, and do the best they could. They sunk three shafts 1200 ft. apart, saw that a large portion of the lode would pay for working, and believed that the rich part of the mine would be found under the Trial shaft. Therefore, they started in three places to try and get under the pay-shoot. It was then impossible to say which was the most promising part of the mine. There was quartz at all three points. They pushed on, and from time to time they had very rich stones of quartz, but it dipped off in another direction. It cost an immense lot of money, but there was an immense lot of work done. At the same time they were working Scriven's; if that had been stopped they would not have had a pay-shoot to-day. They had proved in one part that it was not worth working; but by pushing on the three shafts simultaneously they were in a position to say that they had a pay-shoot, and if the pay-shoot did not return something good to the shareholders it was not worth working. But they had a good pay-shoot. By the aid of a section he pointed out the extent and position of this pay-shoot, and said that in the bottom he expected to have as good a lode as at the top. He corroborated the statement of the Chairman that, by sinking the new shaft, which was larger than Scriven's, it would do for ventilation and hoisting as well, and from the engine-shaft they would sink on the course of the lode. There was some good stuff standing at the bottom of the lode. From that winze he brought home one of the richest stones of ore he had ever taken out. The wood also caused a good deal of expense. They had to take over a contract made by the late manager to take a certain quantity of wood at a certain price. There was as much difference in the quality of wood as of coke or coal, and some of the wood sent in was so green that it put the fires out. He determined to stop that, and the contract was broken, and the wood was now being subjected to inspection, and they now burnt only 11 cords of wood where formerly they burnt 18 cords, which made a material difference in the expenses. In the future they would have no erections to make. The mill was now thoroughly renovated, and he did not think that, in the next 12 months they would require to expend more than 500*l.* or 600*l.* in repairs. He was a large shareholder himself, and he believed they had a splendid mine, and they had nothing to do but to take away the lode which had been explored. If this No. 4 new shaft did not pay there was nothing on the Peru yet found worth working, except it might be in depth.

The CHAIRMAN said that unless they got quartz running to 1¾ oz. per ton they could not make the company pay, owing to the heavy expenses of mining in Venezuela: but he had already mentioned that in September last, they had not only paid expenses, but were earning at the rate of 38,000*l.*, a year net profit. He might mention that the existence of a dyke of this kind was favourable for the formation of rich quartz; and they would probably find in going down that they would get rich stuff down the side of the slide, which he hoped would yield more than 2 ozs. per ton.

Mr. SOWERBY said he did not think it was fair to accuse Mr. Provis of extravagance; Mr. Provis was a large shareholder, and was interested in keeping down the expenses and making the company a success.

Mr. THOMAS B. PROVIS said that much of the quartz which had been left out of the mill would pay well in other countries; but the expenses in Venezuela were enormously heavy. At the same time, he might mention that the expenses of this company compared very favourably indeed with those of any other company in Venezuela.

The CHAIRMAN, in reply to Mr. RUGG, said that when he said expenses would be met by 800 ozs. a month they were running 10 stamps.

Mr. MATHEWS, in reply to a further observation, said he knew Venezuela well, having been out there five years; no doubt expenses were high out there; but, at the same time, the pay in the district of the mines was more than the place warranted.

The resolution for the adoption of the report and accounts was then put and carried with one dissentient.

On the motion of the CHAIRMAN, seconded by Mr. BLADON, the retiring directors, Mr. Duff and Mr. Mathews, were re-elected.

Mr. MATHEWS acknowledged the re-election of Mr. Duff and himself, and reiterated his belief that the mine, if properly and economically worked, would prove a great success.

On the motion of the CHAIRMAN, seconded by Mr. MATHEWS, the auditors, Messrs. Turquand, Young, Weise, Bishop, and Clarke, were re-elected.

The meeting then resolved itself into an extraordinary general meeting, and the CHAIRMAN moved the following resolutions:—

"1. That the capital of the company be increased to 500,000*l.* by the creation of 200,000 new shares of 1*l.* each, such new shares to be called ordinary shares, and to rank with the other shares in the company heretofore issued as ordinary shares, and to be subject to the preference conferred upon the preference shares by the Articles of Association of the company."

"2. That such new shares be offered to the present shareholders of the company in the manner following:—Two shares shall be offered to each shareholder for every complete multiple of three shares (whether preference or ordinary) now held by him at a discount of 15s. per share, which sum of 15s. shall be credited as paid-up thereon when issued, and the balance of 5s. per share shall be payable as follows:—1s. on application, and the remainder by calls of 1s. per share, the first call not to be made payable before the 30th day of September now next, and such offer shall be made by notice specifying the number of shares to which the shareholder is entitled, and limiting the time within which the offer, if not accepted, shall be deemed to be declined, and after the expiration of such time, or on receipt of an intimation from the shareholder to whom such notice is given that he declines to accept the shares offered, the directors may dispose of the same in such manner and at such discount or premium as they think most beneficial to the company, all proper contracts for carrying out this resolution to be made and registered."——Mr. SOMES seconded the motion.

The CHAIRMAN said this increase of capital had been forced upon them by having to sink the shaft, and having met with the dyke. The advantage of this plan of raising the capital was that by paying 1s. per share they had, for three months, the option of taking the shares at any price to which the shares might rise. In July, when the mill begins to run, if there was any truth in the statement made to the directors, they ought to be able to show good profits from that time.

Mr. BLADON approved of the proposed increase of capital provided that two suggestions which he would make were carried out; the first was that a form should be sent to the shareholders informing them that, in addition to their *pro rata* proportion, they could also offer to take such number as they might wish, or which were available, of the shares which were not taken up, so that there should be no keeping back the shares from the shareholders and offering them to the public; and he further suggested that any shareholder taking up the shares should, at any time, be allowed to pay them up in full, so as to make them fully-paid shares.

A short discussion ensued, and several shareholders expressed their approval of Mr. Bladon's suggestion.

The CHAIRMAN said he had no doubt the board would adopt the suggestion of Mr. Bladon. Any shareholder could send in any application he liked, and the board would exercise the best of their judgment in alotting the shares. As regarded paying up in full, the shareholders could do so no doubt; it was attachable to the ordinary shares, and no doubt it would be allowable on this occasion. But the directors must be allowed a certain amount of latitude, and they would do the best they could in the matter. What they had to do was to get this capital and put the concern again on its legs, and he hoped eventually pay a dividend. (Hear, hear.)

The resolutions were then put and carried unanimously.

A vote of thanks to the Chairman and directors closed the proceedings.

ST. JOHN DEL REY MINING COMPANY (LIMITED).

The annual general meeting of shareholders was held at the Cannon-street Hotel, on Thursday,

Mr. JOHN HOCKIN, the Chairman, presiding.

The CHAIRMAN read the notice calling the meeting. The report and accounts were taken as read,

The CHAIRMAN said: My duty in commenting on the report on this occasion is, I am happy to say, a more pleasing one than it has been for some time. The monthly profit realised on the working of the mine for the last six months has been much larger than during the first half of the year, and a monthly profit for 10 consecutive months of the year has been realised, instead of the monthly losses incurred during last year. It is pleasing also to have to remark that this progressive improvement continues. The two months that have elapsed since the date given in the report—*i.e.*, of the new year now entered on—will show a profit of about 1000*l.* a month more than the average monthly profit of the year we are now considering. This result arises mainly from the improvement in the yield of the mineral treated, as it has not been found practicable as yet to increase the output, though arrangements are in progress by which it is hoped that much-desired object may be attained. Notwithstanding, however, the smaller output of 4875 tons, the gold recovered from it was greater by 27,699 oits. than the previous year's produce, and that without picking the mineral, for you will see that, on the contrary, 3000 tons less poor worthless stone were rejected this year than last. I need hardly point out to you the importance of this fact. The quantity of the mineral is the all-important factor in every mine. Short output, imperfect recovery of the metal sought, defects in machinery, and such like, can all be remedied by energy and perseverance, but if the metal is not in the mineral, no human power can improve the returns. We point out in the report that the average yield of gold per ton for the year was rather over ½ oit. or 1 dwt. 4 grs. more than last year. The average you will have seen was 3·622 oits. per ton. The average for the three following months is over 4 oits. per ton, a progressive improvement since 1882. The section of the mine at which the improvement has taken place—the sump and Nos. 1 and 2 stopes, and consequently the deepest parts of the mine—is assuring, for it will be remembered that the deterioration here in the quality of the mineral, as well as the displacement of the lode by killas was most sensibly felt two years ago as a failure in a vital point. Now, it will be seen by reference to the ground-plan there is a compact body of good mineral from the sump westward 170 ft. in length, and varying from 48 to 24 ft. in width, samples of which, you will have observed, the superintendent reports show by assay a gold contents of 11 oits. per ton in the sump. Whether, therefore, we look at the improvement, as shown by the actual returns of the year, or to the improvement in the lode in sight we think we may confidently regard it as likely to prove of a permanent character. In the reduction department active measures are being taken to reduce the loss of gold, and I am glad to be able to say the last few months have shown an increased recovery by re-treatment. Having referred to the satisfactory improvement in the mineral, I would ask your attention to another favourable feature in this year's operations. The reduction that has been made in the cost during the year has been 6231*l.*, a very appreciable sum in making up the year's accounts. It is well known to all who take an interest in the operations conducted at Morro Velho, how much trouble, inconvenience, and loss we have suffered since the surface of the old mine fell in in 1872 from rain water falling during the rainy season (when we have usually 55 or 60 in. of rainfall during the six months) on this unprotected surface of the interior of the mine, and percolating through the debris to the sump of the old mine, and thence through the roof into the sump of the mine now being worked, thence to be pumped to surface. I have estimated this chasm from drawings of it to have an area of 2 acres. For many years the old mine was deemed dangerous to enter, and was rarely if ever visited. But latterly attention has been given to it, and last year a pumping-wheel was completed to take up water flowing into the West Quebra Panella section of the mine, which it has done pretty effectually, but it left the rain water falling on the open space untouched. Later in the year, whilst Mr. Illingworth was at Morro Velho, an inspection of the western part of the old mine was made by Mr. Branfill, the engineer, and it was found that there was a large pool damed back by the debris and resting on the slide, but whether fed by a strong spring or surface water was not quite evident. In March last the superintendent and Capt. Rogers visited the spot again, and found, as indeed Mr. Branfill had, that the pool was of large dimensions—100 ft. long, 40 ft. wide, and 13 ft. deep, and in their opinion was formed by rain water falling into the mine. An examination was made at the same time of the surface of the debris eastward, and it was found so uneven that it was impossible for the water to flow over it in either direction, it therefore pooled on its surface until it percolated through. The superintendent has submitted a plan by which this evil may be got rid of—by levelling the surface of the debris, giving it a considerable slope westward so as to allow the water to flow into the pool, thence to be pumped to surface, or later to flow off by an adit to be opened. This the board approved by wire, and a commencement has been made with the work. A portion—the western—of it only is likely to be completed this dry season, but that will be so much gained. As regards Cuiaba, the operations have continued uninterruptedly during the year, with the exception of a stoppage of the whole works for a period of five days by the breakage of the water-course during heavy floods in February, and which was in part the cause of the diminished produce realised. In diminished produce and additional labour the loss caused by it was at least 500*l.* The result of your operations have been rather more favourable than last year, inasmuch as the expenditure has been about 3500*l.* less, whilst the gold has been only 923*l.* less. The total cost of milling and mining, as will be seen by table at page 76, was 10,457*l.*, or 11s. 1½d. per ton, whilst the gold realised 10,931*l.*, leaving a small profit of 506*l.* on the working account. We still labour under the difficulty of not being able to recover more than 47 per cent. of the gold contents of the mineral, but efforts are being made with the limited means at our disposal to overcome this difficulty. We are also having the matter investigated in this country, in order to see if science can throw any light on the matter. Portions of samples recently assayed by Messrs. Johnson and Matthey are on the table, with the gold contents marked thereon, by which it will be seen how rich in pyrites, and most of them in gold also, they are. Some of them closely resemble the Morro Velho ore. As our colleague, Mr. Illingworth, has been quite recently on the spot, I will ask him to give you his opinion on the property when I have concluded my remarks. I now come to the matter of finance. The statement at page 15 of the report, by taking in the reserve fund, which, however, so treated ceases to be a reserve fund, shows a surplus of 8000*l.* in England and about 1700*l.* the other way in Brazil. Since our last meeting debentures have been exchanged for mortgage bonds to the extent of 3280*l.*, but 21,050*l.* remain unchanged. It is still open to the holders of these debenture to exchange them, and we hope they will, in their own interest, be induced to do so. We think we may also again fairly appeal to the shareholders who have taken no debentures to come forward and assist to improve their own property. (Cheers.) In conclusion, the Chairman formally moved the adoption of the report and accounts.

Mr. S. E. ILLINGWORTH seconded the motion, and made a few remarks upon his recent visit to the mine, especially referring to Cuiaba. He said the first thing which struck him out there was that they had, perhaps, been too sanguine regarding the making of immediately profitable returns from the Cuiaba Mine. The lodes of Cuiaba were of enormous size, and for that very reason he did not think they were justified in expecting that, until they were in a

fully-developed condition, they could make regular profits to any large extent—that was to say they could not expect to have an equally good paying mine as the Morro Velho had proved to be until the mine was in a very similar condition to what the Morro Velho was when it paid its large dividends. In the Morro Velho they took the lode without having to search for it; it was under their feet as it were, and they had simply to work the mine. The other was like a serious of patches; they were only parts of an enormous lode, which they had worked upon, and which they were developing, and which, until they more or less ran into one another at the level of the deep adit, could scarcely be expected to develope into a regular and efficiently developed mine. At the present moment their energies were expended in driving here and there, endeavouring to collect all these patches into one mass, and so work them. Under these circumstances he would more particularly compare Morro Velho with Cuiaba a little closer. The Morro Velho Mine was taken over in the year 1835, and was then described as a fully-developed mine. There were 35 stamps, and everything necessary for a large output. The money spent upon the purchase of it was 56,000*l.*, although when it was taken over it was described as an efficiently, developed mine. Then they had to spend another 40,000*l.* upon it before it could be put in a condition to keep up dividends and there were seven years of developed working before they could put this "developed mine" into an efficient state. At the end of the seven years, in 1841, the mine was preparatory to paying its first dividend; therefore he would take that year and compare it with the present year—not that they were going to pay a dividend in Cuiaba in 1886, but they had so long had the notion that they were going to pay a dividend in Cuiaba that he should like to show the difference between the two mines as they existed at those two different times. The Cuiaba Mine, in 1885, had cost 67,000*l.*, so there was a difference of 30,000*l.* in the capital, and in both cases it included purchase-money. In Morro Velho, in 1841, they had stoping ground of 156 fms. in length, and 34 stopes in number. In Cuiaba they were still exploring and working to get stoping ground, because they could scarcely say they had got a stope. They had developed one or two in Canto Gallo, in the western part of the mine, but as a matter of fact they might say they were working here and there, and were still a long way from having an efficiently developed mine. But still they had this most important fact, that although they were taking lodes here and there, and had to bring to the mills mineral which came from explorations and heavy driving, and all sorts of odds and ends, yet the result was that the total value of the ore crushed was 3¼ oitavas per ton, whereas in Morro Velho, in 1841, it was true 3¼ oitavas per ton were recovered, although they had no absolute statistics at that time as to what the unrecovered part was. In 1841 Morro Velho shipped to this country 66,000 oits. of gold. Cuiaba had produced 27,000 oits. That was not a bad comparison for Cuiaba. He would now come to the point where he thought they might look for an improvement in Cuiaba in the immediate future, and it was this. Their loss at Cuiaba at this moment was from 54 to 57 per cent. of the ore which was raised; whereas at Morro Velho the loss was but 33 per cent., or, in other words, if they took the recovery at Cuiaba at 43 and the recovery at Morro Velho at 67, there was a difference in the two of 24 per cent. against Cuiaba. He thought it was a moderate computation to say that half that loss might be recovered, and instead of making a recovery of only 43 per cent. in Cuiaba the recovery might at least be brought up to 55, or an improvement of 12 per cent., and only 12 per cent. below the recovery in Morro Velho. Supposing this could be done, by a simple rule of three they would see that with the present output, and in the present undeveloped state of the mine, they would recover another 3000*l.* or 4000*l.* per annum which would not only change the present loss into a moderate profit, but a surplus would be left which would positively amount to as much as the first dividend which was paid in Morro Velho. (Hear, hear.) Therefore he said that although, perhaps, they had been too sanguine in looking for immediate returns from Cuiaba, yet he considered their money had been exceedingly well laid out, and it was extraordinary that a mine in that half-developed state should nearly pay its way, and which would, he believed, altogether pay its way if they more efficiently dealt with the mineral. One great reason why they did not more efficiently deal with it was the debentures which had not been exchanged. They could not lay out money in retreatment machinery when there was 21,000*l.* of unconverted debentures hanging over their heads, and owners of which might, in due time, call upon the company to repay them in full. If those who had not exchanged would bring the debentures into the office, and exchange them for those which were offered, the directors would have an amount of money to lay out on retreatment machinery. He did not think that more than 2000*l.* or 3000*l.* would be absolutely necessary for that purpose. The mine was improving in the sump, where they looked for an improvement of returns. Referring to Morro Velho, he said that the returns had shown an increase upon the year before; they had a most efficient staff, and they had a superintendent who was deeply interested in the working, so much so that he was giving extraordinary attention to the reduction department, and almost taking the leadership of the reduction department into his own hands, which was an important part of the work. They had a mining captain who was caution itself, and whose plan of laying out the timberwork reduced the chances of accident to a minimum. They had an engineer whose activity had put a great deal of machinery into most efficient working order during the last two or three years, and had been able to save great expense by repairing the hauling wheel in such a way that it would continue to work efficiently for many years to come. The other officers were devoted to their business, and were pulling together to make the Morro Velho a success. Although it was impossible to make any prediction about the mine, he believed they were in a fair way to make a profit, and he hoped, with the concurrence of the debenture-holders, to pay a dividend. (Hear, hear.)

Mr. SCHOFIELD said he was glad to hear from the Chairman and Mr. Illingworth that the mine had improved so much during the past six months. This had been patent to everyone who had read the reports during that period, and he congratulated them upon the fact, for two years ago the directors gave a dolorous account of the mine being worked out; and practically that was the opinion of many shareholders. For his own part, he never despaired of the mine, and he believed the time would come when the shareholders would see it as lucky as it had been; and it only required the energy, judgment, and practical skill to make it the greatest success in the present gold-mining era in the world, and he did not believe it would be exhausted for many years if the mine was energetically and well worked. He did not know what the condition of the machinery was when Mr. Chalmers took charge of the mine, but two serious accidents were mentioned by telegram a month ago. No letters had been received to explain those accidents; but a letter had been received, written on the 14th or 16th of April, stating that the water had been in the mine to the depth of 25 ft., but that an arrangement had been made by which the pumping machinery had been rendered more effective. No doubt the water would have been got out since then. No doubt the water had driven the workmen out of the sump for a time, and that might account for the reduction in the returns. Therefore, he looked upon the returns as very satisfactory, and as auguring, when the mine was in full work, a return to 4½ oits. per ton. As regarded the improved financial condition, the Chairman had stated that the expenditure had been reduced about 5000*l.*; but it must be borne in mind that the ore crushed was about 5000 tons less for the year, and, consequently, the reduction in the expenditure represented the reduced amount extracted, because he took it that the cost of extraction would be about 1*l.* per ton. He did not look upon that as a matter of congratulation, because it was obtained at the cost of a diminished output. Regarding the suggestion of Mr. Illingworth that 2000*l.* or 3000*l.* should be expended on retreatment machinery, he was of opinion, with Mrs. Glasse, that you must first catch your hare before you cook it, and his own opinion was that there was not mineral there of sufficient valuable description to render it desirable in the present state of affairs to increase the outlay there. He did not agree with Mr. Illingworth's comparison of the percentage of loss. They lost 1½ oits. per ton in Morro Velho, and 2 oits. per ton in Cuiaba, and he contended the percentage of loss upon the produce assay value of the ore was no criterion whether the reduction operations were efficient or otherwise. There was always a certain amount of loss in treating gold, and he asked whether it was worth while laying out so much money in Cuiaba to recover a quarter of an oitava. For his own part he should not lay out any more money in that direction, but he would rather see the debenture debt paid off by devoting the profits to that purpose, and also selling out a portion of the reserve fund if necessary. He believed that in the present year they would make sufficient profit out of Morro Velho to pay off a considerable portion of the debenture debts. For his own part he was willing to go without a dividend for the time, in order that the debt of the company might be paid off. He opposed the creation of the debenture debt at the time, and contended that the preferable plan would be to issue new stock at a small premium, and Mr. Spencer Herapath, who was now dead and gone, was of the same opinion.

Mr. FREDERICK TENDRON (a director) said it was a pleasure to agree with most of the remarks of Mr. Schofield. For his own part he had never despaired of the future of Morro Velho, but when he called attention to the matter some time ago what the directors did not like was the financial position. The directors looked ahead, and saw that, although they were apparently rich and strong, yet if all the liabilities were brought in the position would become dangerously weak. He explained at a previous meeting that the company received cash for the gold by selling drafts on London, and the credit of the company was so good that the bills could be sold at nearly Bank rate, and when the bills were presented for acceptance in London they had three months to run. The directors wished to keep up the credit of the company for ability, and truthfulness, and fair ability in the management of affairs, and also to keep the company in a sound financial position. As long as the company made profits there could be little question, but when losses began to occur the directors did not know whether they might not increase and continue, and they were bound to take care to have money enough in London to meet all outstanding bills; and although they had plenty of money to meet all outstanding bills, yet they had no money to meet the debentures which would fall due in November. When the shareholders were candidly told the position of affairs in December, 1883, and asked to take measures which would provide funds to pay off the debenture-holders who might refuse to renew the debentures in November, 1885, the directors showed foresight and judgment and discharged their duty. Since that date a certain amount of new debentures had been taken up, and now, instead of making a monthly loss, the company was making a monthly profit. Some of the debenture-holders came forward and showed a certain regard for the old company which had paid them so well in former years; they did not haggle and make endless difficulties, and out of 50,000*l.* of debentures 30,000*l.* had been renewed. There was still outstanding about 20,000*l.*; and he hoped that between this and November some of those gentlemen who had refused to renew their bonds would change their minds, particularly as they would see that the company was in an improving position, and 7 per cent. interest was not to be obtained every day on a security so far as this company offered them—the security of the old mine, and also the mine which was being slowly developed at Cuiaba. He hoped, therefore, that the outstanding debenture-holders would renew their bonds, and so strengthen the financial position of the company, and improve their ordinary stock, and bring the company nearer the period when dividends would be resumed. (Hear, hear.) As regarded the amount of the debentures, he did not think 50,000*l.* was an unreasonable amount for a company with a capital of 253,000*l.* As to the mine itself, no amount of skill would enable the directors to put gold in the quartz if it was not there. Mr. Schofield must admit that Nature was not uniformly regular, and certainly in the St. John del Rey Mine it was fluctuating; sometimes they got a large quantity of mineral, which gave them an average of 6 or 7 oits. per ton, and at other times they got mineral which gave them 3, 3½, or 4 oits. per ton. At present it looked as if they were going to have a better zone for mineral, and all they could do was to go through bad times in hopes of good times. (Hear, hear.) As regarded the system which Mr. Schofield had propounded—namely, that there was a normal loss of 1½ oits. per ton, possibly that gentleman was right, but he (Mr. Tendron) should give the matter further consideration. He did not think Mr. Schofield was right. But he really felt glad that they had amongst the shareholders a gentleman who took so much interest in the company, and who was a very large shareholder, and who had initiated a most important principle—namely, that the shareholders should abstain from dividends until the company was put in a sound financial position. (Hear, hear.)

Mr. ILLINGWORTH said he must take exception to the novel theory propounded by Mr. Schofield, that there must be an inevitable loss of 1½ or 2 oits. per ton, because better results could be obtained by moderate retreatment. At Cuiaba they had no retreatment machinery, but they had retreatment machinery at Morro Velho.

Mr. SCHOFIELD said he was afraid the cost of getting it was more than the gold was worth. He looked upon experiments for getting all the gold as mythical.

Mr. RAWSON, having expressed his surprise at some of the statements of Mr. Schofield, went on to refer to the debentures, and said that if the mine continued in its present promising condition there ought to be no difficulty in renewing the debentures.

Mr. JONES said that goldsmiths and ewellers sent the sweepings of their premises to Birmingham to have the gold taken out, and asked whether the tailings of this company's mine could not be treated in the same manner.

The CHAIRMAN said for many years the directors had been doing everything in their power in the direction suggested, and endeavoured to get the utmost quantity of gold out of the stone. Some of it they could not concentrate sufficiently to send to England, and to send the necessary appliances out would cost more than the gold was worth. Therefore the question was whether they could devise simple means which would pay, and which anybody could work? That was now being applied in Morro Velho and also in Cuiaba, and the board believed it would be a success; not that they hoped to get out all the gold, but they hoped to get out a large portion, and during the last three or four months they had recovered a much larger proportion by the retreatment than they had done before. As to the debentures, when they became due they must be paid off, if gentlemen would not renew them. He did not think there need be much misapprehension on that point.

Mr. ROGERS strongly urged that those debentures to holders who had not yet come in should come in and exchange their debentures, pointing out how much it would strengthen the financial posstion of the company, and increase the value of the shares.

The resolution for the adoption of the report was then put and carried.

Sir John Swinburne, Bart., the retiring director, was re-elected, and Mr. George Austin and Messrs. Deloitte, Dever, Griffiths and Co. were re-elected auditors.

On the motion of Mr. ROGERS a hearty vote of thanks was passed to the Chairman and directors, and on the motion of Mr. ILLINGWORTH a like vote was passed to the superintendent and staff at the mines, when the meeting broke up.

WYNAAD ESTATE AND GOLD MINING COMPANY.

The fourth annual general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Thursday.

Mr. H. O. WHITE in the chair.

Mr. W. H. THOMPSON (the secretary) read the notice convening the meeting and the minutes of the preceding meeting, which were confirmed. The report and accounts were taken as read.

The CHAIRMAN said the report began by expressing satisfaction with Mr. Adams, the present manager, and if the shareholders saw the letters sent home by him from week to week they would be impressed, as the directors were, with the way in which Mr. Adams attended to every detail of the affairs of the company. The meeting had been put off until rather a late date, because the board wished if possible to give the shareholders facts instead of estimates in connection with their crops. The crops were, of course, subject to the influence of weather, and estimates were dangerous things to make, and they would rather have given the shareholders facts; but unfortunately the coffee had not arrived, and as the meeting could not be deferred after the current month, the directors had put the 95 cwts. which were on the way at the low estimate of 50s. per cwt. The quantity of coffee, though still small, compared with about 30 cwts. last year. They had now 40 acres under coffee cultivation. In the old days, before mining, there were 150 acres under coffee, but the greater part of the ground was not suited to the crop, and all but the 40 acres had been abandoned. They had about 55,000 cinchona trees, as stated in the report, but the yield would be considerably exceeded. On some of the ground abandoned for coffee a large number of cinchona trees were planted, and out of about 60,000 of these trees 14,000 were now standing, and the manager advised that they should be cut down, as it was impossible to keep 110 acres in order for a small number of trees, scattered all over it, and with the risk of their destruction by fire. When these trees were cut down they would have a large quantity of bark, especially of root bark, which was very rich in alkaloids. In the nursery they had plenty of cinchonas to plant out, but it was a slow crop to grow, and the manager hesitated to bring them out. There was a proposition to extract the quinine from the bark in India, and this might be favourable to the company eventually. They had now between 50 and 60 acres under cardamoms, and Mr. Adams put the average yield at 10*l.* an acre at the least. As to the indigenous plants, Mr. Adams had entered zealously into this matter, and had sent over some samples of the fibre-yielding plants growing on the estate. The soil required, however, was almost nursery ground soil. Mr. Adams was awaiting the results of experiments on a large scale on neighbouring estates before incurring any outlay in growing rhea grass, and the directors had under their consideration the advisability of entering into an arrangement with the syndicate for acquiring the surface rights of the Mammoth Estate, which owing to its large extent of good land for cultivation, and its ample water supply for irrigating and hydraulic purposes, would add very considerably to the value of this company's property, and enable them to extend the plantations sufficiently to reduce the expenses of management to a small percentage of the value of the annual crops. As to the Mammoth Estate loan, it would be seen that the directors had recovered up to date from the syndicate 2760*l.*, which he hoped would be deemed as satisfactory by the shareholders as it was by the board. Of course this matter had involved considerable law costs, but if by spending 5*s.* they got back 1*l.* which could not be recovered without such an expenditure it was wise to spend the 5*s.* Of the balance of 540*l.* due they took it that 290*l.* at all events would be recovered shortly, and if they made any arrangement with the syndicate one of the conditions would be that the amount due to this company should be paid. Mining operations were entirely suspended, but the machinery had been kept in good order. It was now being considered whether it was worth while to go on spending 375 rupees a year for mining rights which they did not exercise. The company had the surface rights, and of course no mining operations could be carried on without an arrangement with this company. As to block No. 2, that portion of the property had now been demarkated, and thus it was properly secured to the company for cultivation. There was, unfortunately, at present no market for their timber in the Wynaad, and the climate did not seem suitable for the cultivation of tea, though a small experiment of five acres had been authorised, and Mr. Adams reported well on it. The expenditure had now been cut down to the lowest possible sum, the directors were working without fees, and the office rent and salaries had been reduced to 188*l.* The Chairman then read a draft balance-sheet to date, showing that the company had about 770*l.* to go on with until the bark came forward. The expenditure on both sides was under 1000*l.*, so that they could see their way for the next financial year at all events. Having referred to some of the items in the printed statement of accounts, and stated that the shareholders would be called together again in October, the Chairman moved the adoption of the report and accounts.

Mr. H. LAMB seconded the motion, and said that with a little money the company could work up the debris in the mine, probably to some advantage. Mr. Adams had recently been in the old workings, and reported that gold was visible.

Mr. HARDING contended that there was no prospect of the shareholders ever getting any return from the company, and said it would have been better to have liquidated when it was seen that the mining operations would have to be given up. He did not believe agricultural operations would ever give them a dividend.

Mr. LAMB pointed out that if liquidation had been decided upon the shareholders would not have recovered anything in all probability. It was, therefore, better that they should make an effort with what capital remained to get something back. The manager said he believed that with 2000*l.* or 3000*l.* he could make the property pay, but it was very questionable whether the shareholders would provide the money.

After some further conversation the report and accounts were adopted.

On the motion of Mr. HARDING, seconded by Mr. H. THOMPSON, the expenses of the committee of investigation appointed in July, 1883, and reappointed in December, 1883, amounting to 65*l.* 8*s.* 2*d.*, were, after some discussion, voted.

Mr. H. O. White, the retiring director, was re-elected, as were also the auditors, Messrs. Monkhouse, Goddard, and Co.

The meeting closed with a vote of thanks to the Chairman.

RUSSELL UNITED MINES.

An extraordinary general meeting of shareholders was held at the offices, Drapers' Gardens, on Thursday, for the purpose of confirming the resolutions, passed at the recent meeting, authorising an increase in the capital of the company.

Mr. THOMAS STEPHENS occupied the chair.

Mr. EDWARD ASHMEAD (the secretary) read the notice calling the meeting.

The minutes of the last meeting were read and confirmed.

The CHAIRMAN said: Gentlemen, after Capt. Bray's exhaustive report read to you at the last meeting, and the remarks I made on that occasion, there is very little news of importance that I can say to-day. Capt. Bray has, however, supplemented his report by a statement of what has been done in the interval, which is as follows:—

June 16.—Stephens' Shaft: We have put in plat solar 9 ft. below the 57, and secured some heavy ground about the shaft. Also laid down tramroad in the cross-cut, and in the level west. We should have commenced driving the level before this had not the water been turned off the canal, which, with the leats, are now being cleaned out. I hope to have the water turned on again by Thursday next, when we shall drain the shaft as fast as possible, and resume driving the 57 west the early part of next week. The deep adit has been driven east 3 fms. 5 ft. 8 in. The lode for the first 3 fms. 1 ft. was disordered by the cross-course referred to in my last. At this point we intersected another cross-course 9 in. wide, underlying a little to the east: for the last 3 ft. 8 in. the ground is more settled, and a better looking lode coming in this drivage. From the appearance this morning I believe we shall meet something good very shortly. Fifty fathoms from the entrance of the adit we have commenced stoping, where the lode is 11 ft. wide, producing good tinwork throughout—a very fine-looking lode.—Surface Work: We are busy making preparations for the stamps, laying down dressing-floors, making buddles, repairing wheels, and other work. The 12-head stamps are on the mine, and the engineer promises to have it erected and in full working order in three weeks from this date, when we shall soon ascertain the value of our tin ground. By the time stamps, *&c.*, are completed we shall have 300 tons of stuff ready to dress.—JOHN BRAY. I may say that Mr. Hamilton, who has frequently visited the mine of late, informs us that all operations have been carried on to his entire satisfaction, and that the erection of stamps and laying out dressing-floors are in a forward state. Our ordinary general meeting will be held in two or three months, by which time we shall have practically proved the value of the recent discovery, and our opinion is that everything

at present points to the result being a success. We think great credit is due to Capt. Bray for the energy and ability he is displaying in carrying out all the work at the mine. I have to propose the following resolution:—

1.—That the capital of the company be increased to 50,000 shares by the creation of 14,000 new shares of 1*l.* each, and that such shares be issued at a discount of 15s. per share.

2.—That the 2700 shares in the capital of the company which have been forfeited be re-issued at a discount of 15s. per share, and be offered to the shareholders holding the existing shares of the company, or otherwise disposed of in the same manner as is by clause 10 of the Articles of Association provided with respect to the new shares be and the same are hereby confirmed.

These resolutions were seconded by Mr. PERTIS, and carried unanimously.

The CHAIRMAN: All that now remains to he done is to register these resolutions at the joint-stock office to complete the legality of our proceedings, after which the shares will be alloted *pro rata* to the present members in the proportion of one share to every existing two shares, with a call of 1s. per share on allotment, the remaining 4s. to be called as it may be necessary.

Mr. JOSEPH LEE: Has anything been done the lode at Stephens' shaft since the last meeting?——The CHAIRMAN: No, the men have been engaged in putting down plat solar, securing some heavy ground in the shaft, and laying tramroad in the cross-cut and level. In consequence of the water being turned off the canal for a short time we shall not be able to resume driving the 57 west before the early part of next week.

A SHAREHOLDER: Do you think the stope in the deep adit will pay for working?

The CHAIRMAN: We have a large extent of tin-bearing rock in the adit, and this stope will be a test as to its value. By the time the stamps are completed we shall have a large quantity of stuff ready for treatment, and we think, considering the facilities we have for cheap working that it can be extracted at a profit.

Mr. BEAZLEY: Is there any change in the lode in the adit end?——The CHAIRMAN: The lode is still in a disordered state, but the last few feet shows it to be improved in character. As we get away from the cross-courses into more settled ground, we fully anticipate finding a productive lode.

On the motion of Mr. STOREY, seconded by Mr. BEAZLEY, a cordial vote of thanks was passed to the Chairman, and the proceedings terminated.

It may be mentioned that 23,800 shares were represented at the meeting, in person or by proxy.

CARTAGO (LIMITED).

A crowded meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Wednesday. The meeting was convened by Mr. Joseph Nelson, who issued the following circular:—

"Immediately after the public appearance of the prospectus of this company—having accurate information respecting the property purporting to be transferred to the company for the large sum of 100,000*l.*—I addressed the following communication to each of the directors:—

"9, Dashwood House, E.C., February 1st, 1884.

"Dear Sir,—From information which has come to my knowledge I find that the statements contained in the prospectus of the Cartago (Limited), are in some essential particulars not only misleading but incorrect, and I should, therefore, caution you against proceeding to allotment upon the applications which have been made, as you will probably be called upon to return the deposits.

"In spite of this warning the board proceeded to allotment, and have since called upon the shareholders to contribute the full amount of their applications. I am now prepared to prove that from the inception of the company down to the present day, the funds contributed by the shareholders have not been applied in accordance with the statements set forth in the prospectus. The misleading circular issued by the secretary to the shareholders on the 30th May last, makes it incumbent upon me to publicly justify the position I have heretofore taken up.

"I would, therefore, earnestly request you to attend a meeting at the Cannon-street Hotel at 2 P.M. on the 17th day of June, where I shall prove the correctness of all my previous statements and call attention to further serious laches on the part of the administration, showing conclusively the necessity for the appointment of a committee of investigation into the transactions of the promoters and directors."

Mr. NELSON, who presided, said he had received letters from about 100 shareholders, every one of them approving the action he had taken, and all expressing the opinion that this was one of those cases which especially required to be enquired into without a moment's delay. In the first place he would deal with the prospectus, as briefly and concisely as possible. The prospectus was issued on the 26th January, 1884, and it stated that the capital of the company was 300,000*l.*, in 1*l.* shares. The property to be purchased was described as comprising an area of 650 acres or thereabouts, situated in Venezuela, subject to an annual rental of 60*l.*, and that the concession was held for 50 years. The prospectus went on to describe not the Cartago property, so much as the El Callao, and in it a letter was published from Mr. Liccioni to Mr. Pinelli expressing the belief that the Cartago Mine would be a very rich one. It was then stated that the only contract was one dated the 21st December, 1883, made between Mr. James Thompson, of the one part, and Mr. F. J. Warner, acting on the part of the company, of the other part, whereby the property was conveyed for 100,000*l.* in fully-paid shares. The prospectus was a very curious one; but after stating that the property would probably be one of the richest gold mines in Venezuela, it said that so satisfied was Mr. Liccioni, the Chairman of El Callao, with the prospects of the company that he had accepted a directorship of Cartago, the only English mining company in Venezuela with which, after long residence in that country, he had allowed his name in any way to be associated with. Then it was stated that it was not expected that more than from 5s. to 10s. per share would be called up during the first 12 months, and the statement was added that it was believed that Cartago, which was said to contain five times the area of El Callao, would outrival that celebrated property. Accompanying the prospectus was a sketch map, but the Ordinance map of the country showed that the sketch map was entirely inaccurate. Instead of Cartago being five times the size of El Callao, it was, in fact, only a fiftieth part of the size of El Callao. The prospectus stated that the area of the property was 650 acres; but he had a copy of a letter from Mr. Liccioni, dated 14th July, 1881, in which he described the Cartago property as consisting of from 90 to 100 acres. The contract was stated to be made between Mr. James Thompson, of Parliament-street, Westminster, gentleman, as agent of Mr. Felipe Pinelli, and Mr. F. J. Warner, acting on behalf of the company, and the consideration, as stated in the prospectus, was 100,000*l.* in 1*l.* shares. It was also provided that the vendor should receive a commission of 4 per cent. on the 300,000*l.* capital, even on the 100,000 shares allotted to the vendor, and in a contract dated three days after the issue of the prospectus, it was provided that if the commission should amount to less than 12,000*l.*, it should be made up to that amount in fully-paid shares. ("Oh, oh!") Actually he believed that between 60,000*l.* and 70,000*l.* was subscribed; so that about 6500*l.* must have been paid, and the balance of the 12,000*l.* in fully-paid shares.

A SHAREHOLDER: 78,000*l.* was the subscribed capital.

The CHAIRMAN said that Mr. Thompson, the nominal vendor, and Mr. Warner had been fellow clerks, and were well acquainted with each other, and Mr. Warner asked Mr. Thompson to do him a good turn.

Mr. WARNER emphatically denied this statement.

The CHAIRMAN, however, affirmed the accuracy of what he had said. Mr. Thompson gave the assistance, but he did not authorise the use of his name, and, in fact, he went to Mr. Gordon, a solicitor of Bedford-row, to dictate for him a letter repudiating any connection with the company. That letter was sent to the papers, but it did not appear in any of them, or probably the capital would never have been subscribed. Mr. Thompson had stated that he had no written authority from Mr. Pinelli at all, and yet he was described as the vendor. Then, as to the statement that Mr. Liccioni had consented to join the board, Mr. Liccioni denied having done so, and the fact that he had entered into negociations for selling the El Tigre property to Cartago, proved that he could not be a director of the latter company, for it was well known that a director of a company could not be interested in any sale to the company of which he was a director. (Cheers.) There had been no meeting of Cartago except the statutory meeting held in May, 1884; when it was stated that a contract was submitted to the shareholders and approved for the acquisition of the El Tigre property, whereas there was no contract in existence with that object until the following September. He believed that scarcely a shilling of the shareholders' money had been spent on the development of the Cartago property; it had, in fact, gone in commissions, in London expenses, and in acquiring, at an expense of 30,000*l.* in cash and 30,000*l.* in shares, the El Tigre property. This El Tigre property might possess great value; but he had the most conclusive evidence that it would require a very large amount of capital to make it remunerative. The company which formerly worked it were obliged to go into liquidation because they had not capital enough to work it, and he read a letter from a gentleman who had recently visited both properties, in which he stated gross misrepresentations had been made.

A SHAREHOLDER: Is the distance between El Callao and Cartago correctly stated in the prospectus?——The CHAIRMAN said it was; but while the sketch map showed that the El Callao lode would strike the Cartago property, the Ordinance map showed that the lode would not run within 4 miles of it. (Laughter.) The map of the country, in fact, demonstrated that the formation of this company was one of the most impudent frauds ever perpetrated. (Cheers.)

The CHAIRMAN, in reply to a question, stated that the directors had, under the power given to them by a very extraordinary Article of Association, refused to transfer the shares he had bought in the market—(laughter)—but knowing a good deal of the facts, he had been pressed to take the matter up by some of the largest shareholders. In the course of his reply he stated in 1881 Cartago was offered for 4000*l.*, whereas this company had paid in shares and cash, 112,000*l.* for it. He had it on good legal authority that the misrepresentations in the prospectus were so gross that every shilling subscribed by the shareholders could be recovered, if the directors and promoters were worth the money. (Cheers.)

Mr. SWABY followed with a read statement condemnatory of the formation and carrying on of the company.

Mr. HARRIS: As Mr. Thompson has repudiated any connection with the company, to whom were the cheques for commission paid?

The CHAIRMAN: I cannot tell you. Perhaps Mr. Warner can.

Mr. WARNER: Mr. Thompson has not repudiated.

Mr. BYRNE: I beg your pardon. I act for Mr. Thompson, and I say he never had 6d. from the company. (Cheers.)

After some further discussion of a very animated character, the CHAIRMAN moved "That a committee of investigation be formed for the purpose of enquiring into the formation and administration of the company, with power to inspect the books and documents of the company, and that the directors be requested to furnish the committee with every information in their possession or power."

Mr. HENRY HARRIS seconded the motion, which was adopted unanimously.

The following gentlemen were severally elected to form the committee, with power to the Chairman to fill upon any vacancy:—Mr. Joseph Nelson (Chairman), Mr. R. Swaby, Mr. Henry Harris, Mr. James Devellin, Mr. C. P. Bennett, Mr. Ernest C. Clarke, and Mr. W. O. Reader.

It was also decided that the shareholders should be requested to contribute 3d. per share towards the expenditure of the committee.

The meeting closed with a cordial vote of thanks to Mr. Nelson for his action in the matter.

CHONTALES COMPANY.

An extraordinary general meeting of shareholders was held at the offices of the company, Gresham House, Old Broad-street, on Tuesday, to meet the manager, who arrived by the last mail; to consider the circular from the directors, and report from the manager; and, if so determined, to pass such resolutions as might be deemed expedient for raising the necessary capital for the further development of the mine.

Mr. CHARLES S. HILL presided, in the absence of Earl Nelson (the Chairman of the company), owing to indisposition.

Mr. J. JAMESON TRURAN (the secretary) read the notice convening the meeting, and also a letter from Earl Nelson, expressing regret at his inability to be present.

The CHAIRMAN said it was a matter of regret to the board, as it would doubtless be to the shareholders, that Lord Nelson, who had always taken such an interest in the company, and had dealt with its affairs in such a lucid manner, was prevented by indisposition being present at that meeting. In opening the proceedings he would make just a few prefaratory remarks, and they would refer to proceedings which were known to the great body of the shareholders who had been in the company for any length of time. The driving of the deep adit level at Consuelo had brought them under the old nail, or deposit of gold, lying there untouched for years. The ground had fallen together soon after civil war broke out, during Capt. Paul's management, and it was useless to attempt to reach it from above, therefore, the deposit was recently reached by a deep adit level which was carried along 900 ft. By Mr. White's persevering efforts he succeeded in getting under the rich deposit, and for the time it lasted it turned out to be a rich vein, and there were expectations and legitimate ones, that it would hold down in depth. Preparations were therefore made for further sinking; but, unfortunately, the lode pinched out, and they were left without results there after realising about 11,000*l.* It then became necessary to consider their position further. It had been necessary to spend a great part of the money so realised in other parts of the property; but the mine upon which they now relied to help them through their difficulties was the San Antonio Mine, lying to the west of Consuelo. In former times, until the workings were not able to be proceeded with, there were evidences of rich deposits in the San Antonio Mine, and there had been a succession of levels, cross-cuts, ventilation risings, and a number of other works carried out which it would be unnecessary for him to explain; but the simple fact was that they were now very nearly under the old workings, and they were hoping and expecting to get funds from that source. He did not pursue this subject further, for he intended to ask Mr. White, their manager, who had been resident on the property for seven or eight years, to explain all the matters in detail to the shareholders. He might state, however, that some years ago the company acquired a property called the Consuelito, in which there was a continuation of the Consuelo lode; but they had not had the opportunity of properly testing it. As the lode had, however, yielded a rich deposit of gold it was not unnatural to expect that a similar experience would be repeated in Consuelo. Of course, no certainty could exist in such a matter; but they were well favoured by probabilities, which were so often the mainspring of mining operations. To do the necessary work would, of course take some time, and Mr. White had furnished them with an estimate of the cost, involving an amount of something like 5000*l.*, as the necessary expenditure to do justice to this Consuelito sett, and this was the reason why the shareholders had been called together—to submit to them, as the directors intended to do—propositions for the raising of that capital. The circular which the board had sent out had met with some favourable answers. Of course, with mines in the condition that their mines were it was not to be expected that shareholders would come forward to subscribe for the denominational value of the ordinary shares; but it was a common proceeding, and one justified by experience, too, in certain cases to issue shares at a discount. If the event turned out a prosperous one, those who subscribed would, of course, reap the benefit. But they were not, it was believed, solely dependant upon that source of revenue, inasmuch as contemporaneously with taking proceedings to open up Consuelito, the further works that were necessary to come under the old workings in San Antonio would be prosecuted. The resolution which it was proposed to submit for the sanction of the shareholders—"That this meeting is of opinion that it is essential to the interests of the shareholders to raise further capital for developing the Consuelito Mine, and for this purpose sanction the issue by the directors of the 16,051 ordinary shares of 1*l.* each now unissued at the price of 5*s.* per 1*l.* share; and the execution by the directors of such contracts as may be necessary to free the holders of liability in respect of the 15s. per share which may not be paid up in cash."

The SECRETARY read the following report on the property dated May 25th:—"I beg to inform you of my arrival in England on the 11th instant, and of our future prospects at the mines. We have done nothing at Consuelo since my letter of November the 5th, in which I referred to Consuelito as a speculation that would be sure to give immense profits if we were fortunate enough to meet with another rich shoot equal to what was discovered on the same lode at Consuelo. I am still of opinion that to extend the Consuelo level into Consuelito 1000 ft., would cost about 5000*l.*, and it would not be worth the company's while to undertake this, without sufficient capital to prove the mine with satisfaction; neither, if no capital can be raised, could I recommend my return again to the mines. We hope in about three months more to be under the old working of San Antonio, but the profits we may get from this would be for a time best used to open our reserves in San Antonio, and also to continue the deep level into the Trinidad Mine, as reported by Mr. Bell-Davis. If these explorations bring us good returns they may save the necessity of calling up the whole, or any part, of the 5000*l.* for the exploration of Consuelo and Consuelito Mines, but to rely on this alone may bring us again into difficulties. If we attempted to open Consuelito without capital, in the alternative of a failure in the returns from San Antonio, everything would have to be brought to a standstill; on the other hand, the prospects of Consuelo and Consuelito, though a matter of speculation, are not to be despised. It would be singular, indeed, if, in the 1000 ft. we did not meet with another rich bunch of ore, and to abandon the mine without testing it further (on finishing a main bunch the produce of which averaged about 24 dwts. to the ton) would be very inexpedient, more especially as the company have complete machinery on the spot for a large scale of working, with levels and tramways leading to the stamps, all of which are in first-class working order. Many a company has been started with all the cost and risk of the erection of machinery, which we have ready to hand, on less speculative chances than this new venture of ours, and there is no doubt that if we come upon another equally rich shoot in our deep adit the extent of backs would render us one of the richest mines yet recorded."

The report from the mines, dated May 5th, after Mr. White had left, was also read by the secretary.

The CHAIRMAN said it might be interesting to the meeting to know how the company stood financially, and the secretary had prepared a statement which he would read.

The SECRETARY read a financial statement showing that the balance in hand on deposit and current account was 2286*l.* 13s. 10d. The liabilities were:—Acceptances due 17th June, 200*l.*; due 15th July, 200*l.*; due 13th August, 200*l.*; due 14th September, 200*l.*; and letters of credit in transit, 600*l.*; making together 1400*l.*, and leaving a balance in favour of the company of 886*l.* 13s. 10d., when all the liabilities were paid.

The CHAIRMAN: That includes two letters of credit which are unused.

A SHAREHOLDER: Are there any other liabilities?——The CHAIRMAN: No, none at all.

Mr. PALMER opposed the raising of further capital to develope the Consuelito Mine. He thought the money in hand should be used to open up the San Antonio Mine, for the probability was that this would give them fresh capital, independent of raising fresh money from the shareholders. The returns for the mine were not so explicit as they should be, for in some cases the amount of ore treated was not given, nor was the net result stated. He frequently came up from Bristol to the office to get all the information he could about the company; but after copying some of the correspondence, the secretary had refused to let him see the rest of it, and said that he must go to a Court if he wished to copy other letters.

A SHAREHOLDER pointed out that Mr. Palmer was not referring to the subject before the meeting, which was as to whether or not fresh capital was to be raised. The time of the shareholders was too valuable to be taken up with fruitless discussions. (Cheers.)

The CHAIRMAN said the board accepted the fullest responsibility for refusing to let Mr. Palmer proceed with his investigations.

The SECRETARY added that some months ago Mr. Palmer insisted on making extracts from Mr. White's letter, and these letters got into the papers from Mr. Palmer, and not from the board, and he had, therefore, been authorised to refuse to let Mr. Palmer copy the letters. (Hear, hear.)

Mr. PALMER then proceeded to refer to the "old, old story" of the pneumatic stamps, when

A SHAREHOLDER said: These stamps were sold years ago. What has it to do with us now? (Hear, hear.)

Mr. WHITE, however, gave a full explanation as to why the stamps were sold.

Mr. WHITE, in reply to Mr. PALMER, said they had machinery enough to treat 3000 tons of ore a month. They had treated 200 tons a month in his time at the mine, without using the whole of the machinery.

After some further remarks from Mr. PALMER, the CHAIRMAN said it seemed to be the delight of Mr. Palmer to address the meetings at great length, and to throw insinuations of all kinds on those connected with its administration. Why such a course of proceedings was pursued he (the Chairman) could not say.

Mr. WHITE said that after driving the deep adit level for 1000 ft. they came on a deposit which yielded 11,000*l.* of gold. The ground beyond this deposit was rather confused at surface; but it was similar to the western ground. If they reached another bunch of gold they would have one of the richest mines in the world, for they would have the whole of the deposit, whereas the greater part of the deposit which they had been at work on had been taken away by the old workers. In one month the company had made a profit of 1300*l.*; but, of course, that was obtained by taking the backs away. If the funds were provided to continue the level another 1000 ft., they would be able to test the mine thoroughly. Even if they were successful in San Antonio, it would only be a hand-to-hand working; but the profits derived would enable them to drive into the Trinidad Mine and test it thoroughly; but if they relied solely upon San Antonio and the lode should fail there, they would have no means to go on with the development of Consuelo; but, of course, if the profits from San Antonio gave them the funds they required, they would not spend the money which it was now proposed to raise. They ought, however, to have money to fall back upon.

Mr. WAGSTAFF asked what were the indications at Consuelo?——Mr. WHITE replied that they were encouraging. The lode had contained a very rich deposit, and there was every probability that they would find another good deposit. There was a good-looking lode in the breast of the level, and indications were quite as good east of shoot as they had been west of it. With similar indications it was not unreasonable to expect similar results.

Mr. WAGSTAFF: What is the depth of the level from the top?——Mr. WHITE: About 180 ft.

Mr. WAGSTAFF: What is the nearest shaft?——Mr. WHITE: We work the stuff from the levels. It is put into the wagons and trammed in to the stamps at once.

Mr. WAGSTAFF: What about the ventilation?——Mr. WHITE The mine is thoroughly ventilated at present. When we want ventilation we put up rises in the best part of the level to give ventilation, and to develope the mine at the same time.

Mr. WHITE, in reply to Mr. SYKES, said the lode at San Antonio had improved before he left, and he expected they were in paying quarters there now. Of course, if they had the money to develope both mines they might have a very rich mine.

Mr. WAGSTAFF: But the last rich mine only gave us 13,000*l.*

Mr. WHITE: We only had 30 ft. of backs then, we should now

have 180 ft. if we got a new shoot. The greater part of the old deposit was taken away by the old workers. Mr. White went on to point out the workings on the map, and in reply to other questions said the ore near the surface paid best. It would not pay to go much below the main level, but in the main level they had had ore worth 1¾ oz. to the ton. He had sold the pneumatic stamps to provide the funds for getting through the hard blue rock and rise into better ground. They could trace the lode for a mile, but they could only prove its value by actual working. San Antonio was down 250 ft., or about 70 ft. lower than Consuelo.

Mr. J. FOSTER said the appearances seemed to justify the continuance of the level. What percentage of yield would pay?—Mr. WHITE replied that 4 dwts. would pay. The old workings gave an average of 13 dwts. to the ton.

Mr. FOSTER remarked that as the shares were quoted at 2s. to 3s. there seemed to be reason to doubt whether the shares would be taken up at 5s.

The CHAIRMAN replied that if the shares were not taken up it was possible that the existing shares would lose what market value they now had.

The SECRETARY said the Chairman (Lord Nelson) would take his proportion of the shares proposed to be issued, and he read a letter from one of the largest shareholders expressing a similar intention.

Mr. FOSTER suggested that it would be better to raise the money required by the issue of preference shares rather than by issuing shares at a discount.

After some further conversation, Mr. BISCHOFF (the solicitor) suggested the adjournment of the meeting, so that the board could communicate privately with some of the largest shareholders with the view of ascertaining what *bona fide* support they would give to one or the other mode of raising the capital.

Mr. WHITE, in reply to a question, said the Nicaraguan Canal would go close to the property, and would, of course, increase its value.

On the motion of Mr. FOSTER, seconded by Dr. BRADSHAW, it was decided that fresh capital should be raised, and that the meeting should be adjourned to allow the directors to communicate with the larger shareholders as to the best means of raising the necessary funds.

A vote of thanks having been passed to the Chairman the meeting was adjourned *sine die*.

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—H. Trezise, June 18: The lode in the 138 east, is worth 5*l.* per fm.—Bridge Lode: We have not yet intersected the lode in the drivage at the 90, having driven a sufficient distance to make it secure for the men while the skip is working, we shall proceed forthwith to put in skip-road, and fix ladder-way to the 90 after the completion of which the drivage will be resumed with all speed. The lode in the 75 west, is about 2 ft. wide, composed of capel, mundic, and a little ore. In the 62 east the lode is 3 ft. wide, and worth 6*l.* per fm. The several stopes in the back of the 62 east are worth on an average, 4*l.* per fm. each. In the 62 west the lode is 3 ft. wide and promising, the ground continues of a very favourable character for progress, and for the production of copper ore. One or two pitches have fallen off in value, the others are just as they have been. There is no other change to notice in the mine.

CARN CAMBORNE.—W. C. Vivian, June 18.—We have no alteration to notice in the 105 fm. level west, nor in the stripping down of the lode in the 70 west. On any change taking place worthy of remark you shall be quickly advised of it.

CATHEDRAL CONSOLS.—Stephen Davey, June 11: We yesterday intersected a small white crossing in the 84 driving east, which improved the lode in appearance. It is now composed of white prian, and a very soft friable quartz, mixed with black copper ore. The ground is also changed, being elvan of a greenish colour, and easy for driving. The result of this change we shall see in a few days. The lode driving west has been a little smaller since last reported on, but is now again 4 ft. wide, and seems to be still opening; composed of a beautiful white quartz, 3 ft. wide, of a fragile nature, and mixed with strong yellow copper ore. The ground is much easier for driving and better progress is being made in this direction. Engine and pitwork working well, and the men are making excellent progress in driving.

CREIGIOG.—H. Hotchkiss, June 17: There is no change to report in the lode at the 130. In the west end the lode maintains its former size, 4½ ft. wide, and is mixed with blende.

D'ERESBY.—John Roberts, William Sandoe, June 17: During the past month we have been opening and sinking on the lode on the hanging at No. 6, and hitherto the results have been very satisfactory. There is to-day a further improvement in the bottom of the sink, close under the shale, which was made by a sinking hole in the deepest point, and at present it looks as though it had touched a new bed of lead ground, the result of which we shall watch with great interest. The lead-bearing course here is from 4 to 5 ft. wide, the matrix of which is chiefly carbonate of lime, and everything that could be desired for making a rich course of lead. On the heading the lode in the end is much the same as we described it a week ago. Both the sole and the roof are looking well, but the middle of the end is not so good. Owing to the hardness of the ground it has been rather spare for driving, but after the ground has been opened it will cut more freely, and the stoping done more cheaply, the stope at the bottom of the shaft is much the same in value as we have formerly reported it, but till we sink further it is very nearly exhausted. We have now the new wire-rope in its place, and there will be no fear of sinking under it, as there was with the old one. As soon as we have finished winding-up the stuff to complete the present sampling we shall commence sinking forthwith, and continue it without intermission, so as to get down and cross-cut through the great lode to the hanging at another level, and so open both parts of the lode.—P. S.: Since writing the report the men have come up, and say the lode in the hanging is looking better.

D'ERESBY.—John Roberts, June 18: The lode in the bottom of the sink on the hanging is rather improving than otherwise. We had another sinking hole to-day still deeper, which threw up some splendid lead. I have not seen this part of the lode look so well before since we cut into the silver chamber at No. 5. This clearly shows one thing, if no more—that the lodes preserves its productive qualities in depth, and the poor part we passed through is simply an accident, and not the normal condition of the lode. I have been accused of being too sanguine as to the value of the mine in depth, but whether the accusation be right or wrong I am more sanguine on that point to-day than I have ever been before. We appear to be now on the top of another bunch, and, from what can be seen of it, it appears to be widening fast as it goes down, as shown in the enclosed sketch. No doubt we shall have more to write soon which will be more encouraging.

DEVON GREAT CONSOLS.—Isaac Richards, June 18: Wheal Maria: In the 12, east and west of the eastern shaft, on the Capel Tor lode, the lode is 2½ ft. wide, of a promising character, and is yielding small quantities of copper and arsenical ores.—Wheal Emma, Railway Shaft, New South Lode: In the 220 west, on the south part of the lode, the lode is 4 ft. wide, of a strong masterly character and contains small quantities of copper, tin, and arsenical ores.—Watson's: In the 124, east and west of the engine-shaft, the lode is 2 ft. wide, composed of capel and quartz, with a little arsenical mundic, disseminated through it. In the 112, east of the engine-shaft, the lode is 4 ft. wide, composed of capel, quartz, and peach, with fluor, with some good quality copper and arsenical ores. In Trutheway's rise in the back of the 112, west of the engine-shaft, the lode is 3 ft. wide, yielding saving work of copper and arsenical ores. The other points of operation throughout the mines are without important alteration.

EAST BLUE HILLS.—S. Bennetts, W. K. Mitchell, June 17: The south portion of the lode in the east end of the 20 is worth, for 6 ft. wide, 20*l.* per fathom, and in the west end of the same level for a similar width is worth 35*l.* per fathom. The 10 east end is not yet clear of the cross-course (No. 2), and the lode is somewhat disordered. In the adit east end the lode is 2 ft. wide, and worth about 5*l.* per fathom. Sometime next week we hope to commence putting the roof on the engine-house.

EAST CARADON.—William George, June 16: Having completed taking up the materials in Williams' engine-shaft, we have this week restarted the north engine, which is working very satisfactorily, and we now hope to make good progress in forking.

EAST WHEAL ROSE.—W. Skewis, T. Doidge, June 16: Penrose's 130 fm Level: All the work at and about this level has been done to make the shaft secure. Ground has been cut, bearers and cistern, together with the 20-in. plunger bottom, all fixed in their places, and we expect to complete the rearing up of the lift and the sending down and connecting the main rods and be in a position to have the whole of them working at the end of this, or at latest, by Monday or Tuesday of next week, when we shall at once commence to drop the work below this level. If the shaft should prove to be free from obstruction we shall have the water pumped out to the bottom of this shaft in a very short time.—Baynard's: The 90 cross-cut is driven to within about 6 or 8 ft. of the point where the western part of Middleton's lode should be intersected. The ground is now somewhat easier than it has been during the driving of the last 2 or 3 fms., and there is pretty much water flowing from the end. This would indicate that we are near the main part of the lode, notwithstanding we have since last report passed through two small branches, which at the point seen are of no value.—North Wheal Rose: The level and plat at the 130 are cleaned up to the bottom, and the few feet sunk in the shaft below the plat is now being cleaned up. When this is done the plunger lift, which is ordered, will be fixed immediately it is delivered on the mine. The new boiler is placed in the boiler-house of the 100-in. engine, and every effort is being made to complete its connection with the other boiler, so that it may be set to work as early as possible. The erection of launders for carrying clean water to the engines will soon be finished, and will be of great value to the future working. We have no improvement to report in the tribute department, but all the other work is proceeding with the usual prosperity and satisfaction.

ECTON.—William Bowman, June 15: Since my previous report all operations (both at surface and underground) have made steady progress. Water Bank winze is now down about a fathom below the 58 station. We have delayed putting in the steam pump there for a few days on account of the difficulty of preserving it from shots (the rock being extremely hard flies with great force), but I hope to have it at work this week, which will much facilitate the sinking. The cross-cut from Clayton deep adit (towards Water Bank) is now forward about 21 fathoms. The winze sinking below adit in Chadwick's Mine is entering a "saddle" of the formation; there is a slight increase of water, and a little good copper ore in the vein. We are now down 12 fathoms below adit, and shall have to make some fresh arrangement for dealing with the water, or suspend the sinking before long—probably the latter—until the water is let down into the 80 fm. south cross-cut, which is nearing the vertical position of this point. In Clayton engine-shaft we must be very near the bottom, so far as any tradition will guide us; but as yet have no connection with the northern ore chambers since passing the 125. We can, however, get down these old chambers nearly to the water line, which continues to sink with the water in the shaft. We find quite as good ore in places below the 125 as any seen there, or above, and I feel sure the old workers have had a remarkably rich pipe, or they would not have neglected the ore we now find in position. Other points of development are much as previously reported, except that Vivian's vein (in the north-west end) is stronger, and yielding more ore than at any previous time. This, however, only points to productive ground below, and, I believe, the several good branches of lead and copper ores intersected in this drivage, and also the carbonate pipe, followed down from Salt's level, will prove to be connected with the traditional course of copper left in the "back" of the 80 fathom level in old Ecton Mine; the dip and position of all these shallow western deposits are directly pointing to this conclusion. We have drawn to surface some of the orestuff from 50 and 110 fathom levels, to clear connection with the shaft, but will suspend further operations in this department until room is prepared to receive the stuff near the site of proposed dressing-floors.

GLASGOW CARADON CONSOLS.—W. Taylor, W. J. Taylor, June 15: South Lode: In the 126 east the part of the lode carried is producing good stones of ore, and letting out water freely. We have not cut into the north part, but shall do so soon to prove it. In the 114 east the lode is worth from 12*l.* to 14*l.* per fathom, and likely to improve shortly. The winze in bottom of this level is worth 5*l.* per fathom; ground easier for working, and lode should improve. The stopes in the back of this level are worth 12*l.*, 12*l.*, 15*l.*, 10*l.*, and 12*l.* per fathom respectively. This part of the lode continues to look very well, and turning out good quality of ore. We are anxious to get the 126 on to take this same shoot of ore at that level. There is no alteration to notice in the tribute pitches.

GOODEVERE.—R. Knott, June 17: We continue to force on the adit end east, which is being driven with a view to getting under the winze recently sunk below the shallow adit, and which went down in a very fine looking lode. The ground in the end continues favourable, and fair progress is being made; the lode is presenting a good appearance, with water freely flowing from it; should we make a discovery here, which there is every probability of our doing, it will considerably enhance the value of the property. I would also remark that we are now about 150 fathoms from surface; and as the air is getting rather bad I recommend that a rise should be put through to surface, which would enable us to effect a communication with the winze above referred to, after which a good mine will, in all probability, be quickly laid open.

GREAT HOLWAY.—W. T. Harris, June 18: Roskell's Shaft: The ground in the 95 north is still favourable for progress. In the joint the promising indications last reported are fully maintained, and an increase of water issues from the forebreast.—Level Engine-shaft: In the stope in back of the 80 east the lode is 2 ft. wide, yielding lead and blende in paying quantities. The pitch is producing 8 cwts. of lead and 1 ton blende per fathom. No. 1 pitch in back of the 60 west is worth 15 cwts. lead and 1¼ ton blende per fathom. No. 2 pitch continues to yield splendidly of both lead and blende—3 tons lead and 1½ ton blende per fathom. No. 5 pitch is worth 2 tons lead and 1½ ton blende per fathom, and very promising for further improvement. No material change in any other pitch.—Brammock Shaft: No. 1 pitch in back of the 60 east is producing 1½ ton lead and 1½ ton blende per fathom. No. 2 pitch is worth 10 cwts. lead and 1¼ ton blende per fathom. No. 3 pitch is worth 8 cwts. lead and 1¼ ton blende per fathom.—Office Shaft: The pitch in back of the 60 west is yielding 8 cwts. lead and 1 ton blende per fathom. Dressing and surface operations progressing with usual regularity. The 33 tons of lead sold to-day realised 9*l.* 5s. per ton.

GREAT LAXEY.—F. Reddicliffe, June 17: On completely cutting through the west branch of the lode in the 271, and driving upon its course to the present, it can scarcely be said that the prospects have improved at that point; the lode, however, is sufficiently large, containing much spar, but only here and there a stone of blende ore. The 259 and 247 ends continue without change of any consequence. There are two stopes in the sole of this level, each of which is worth about 8*l.* per fathom. The rise in the roof of this level has continued pretty good for about a month past, and is worth 25*l.* per fathom at present. There is no new feature in the 235 end south, and as yet there is nothing of that strong lode of copper ore which should soon be making its appearance there. One of the stopes in the 145 roof is worked up to the 130, and is now being continued as a joint rise and stope in the roof of that level, and is worth 20*l.* per fathom. The joint rise and stope in the roof of the 145 is not so good as it has been; present value 10*l.* per fathom.—Dumbell's: The shaft sinking below the 243 is still in clean work, the lode apparently still keeping to its perpendicular dip, having not yet come into it. The lode in the 243 end has not yet been "picked up" since passing through the slide by which it has been thrown, but we expect the cross-cut which is being driven west in search to be now near it. The 230 end is of small value, but we anticipate it will soon enter better ground. The driving from the top of a rise in roof of this level, for the purpose of effecting a communication with a winze in the 215 for ventilation, &c., after opening some good ground, has become poor; it has, however but 2 or 3 fms. to go to effect a communication. A new winze sinking in this level is worth 12*l.* per fathom, and a stope in sole, lately worth 15*l.*, is now worth 20*l.* per fathom. The 215 end passed through a slide lately, which had the effect of lessening to some extent the value of the lode, which in about 2 fms. since driven has been worth first, 20*l.*, now 30*l.* per fathom. The 60 rise has become poor, and, thinking it better to see more in the 37 before continuing this farther, we have suspended it for the present. The men are now stoping in the rise, the value at present being 10*l.* per fathom. The only other point throughout the mine changing to require remark is the 37 end north, where in the last few days a little ore has come in to the value of 10*l.* per fathom or so.

GREEN HURTH.—James Polglase, June 11: The bottom end is worth for lead 2 tons per fathom. The 44 end has improved, worth 1 ton per fathom. No. 1 stope in back of the 44 is worth 5 tons per fathom. No. 2 stope in back of the 44 is worth 4 tons per fathom. No. 3 stope in back of the 44 is worth 2 tons per fathom. The middle level end, in back of the 30, is worth 1 ton per fm. No. 1 stope, in back of middle level, is worth 2 tons per fathom. No. 2 stope, in back of middle level, is worth 1 ton per fathom. The adit level north of new footway is worth ½ ton per fathom. We have seen stones of lead in the adit level east during the week. Dressing going on well.

HEALEYFIELD.—John Trelease, June 12: No. 1 stope in the Grindstone sill is still worth 10 cwts. per fathom. No. 2 stope has improved to 15 cwts. per fm. No. 3 stope worth 10 cwts. per fathom. We hope by the end of next week to get the north fore-end started away northward again. Dressing going on regularly. The mason will (weather permitting), get the walls of the engine-house up next week. We will then start with the roofing as quick as possible. We are still busy with the shearing down of the Whitwell shaft, and retimbering it.

KILLIFRETH.—John Michell, Joseph Tamblyn, June 18: The lode in the 90 end west is 2 ft. wide, producing good stones of copper ore. In the 70 end, west of cross-course, lode is 5 ft. wide, worth 14*l.* per fathom. This end east of shaft is suspended for the present; the men are rising in the back to communicate with the winze. We commenced to sink in the bottom of the 50; but was obliged to stop in consequence of the water. The lode in the rise is looking very kindly, producing a little tin and mundic. The lode in the 70, east of Hawkes' shaft, is worth 10*l.* per fathom; the lode in the 70, west of Hawkes' shaft, is worth 20*l.* per fathom. Our stopes in the back of the 60 fm. level are looking quite as well as last reported. The other parts of the mine are also looking much the same as when reported last.

LEADHILLS.—Arthur Waters, June 15: Gripp's adit, north of Glengonar shaft, is driven 317 fms. 3 ft. 3 in.; lode composed of quartz of a promising character.—George's Roust Mine: The rise in Gripp's north, near the end, is worth 30 cwts. of lead ore per fathom.—Brown's Mine: Jeffrey's engine-shaft is 4½ fms. below the 100 fm. level; lode 5 ft. wide, composed of nice-looking quartz. We expect to get into No. 1, south run of ore, in a short distance further sinking of the shaft. No. 1 stope in back of the 100, south of the above shaft, is worth 50 cwts. per fathom, No. 2 stope 30 cwts. per fathom, No. 3 stope 30 cwts., and No. 4 stope 70 cwts. per fathom. The 100, south of Wilson's shaft, is driven 34½ fms.; lode is present end 4 ft. wide, worth 40 cwts. per fathom. The stope in back of the level, south of shaft, is worth 55 cwts. per fathom. We are stoping from the winze here, and shall get to a much richer ore deposit as the men proceed. The 85, north of Jeffrey's, is driven 63 fms. 4 ft. 3 in.; lode 7 ft. wide, quartz and good stones and lumps of lead ore of a very promising character indeed. The stope above the level, south of Jeffrey's, is worth 45 cwts. per fathom. The stope above ditto, south of Wilson's, is worth 95 cwts. per fathom. Stope north of shaft 45 cwts. per fathom. Stope in the 70, south of said shaft, is worth 40 cwts. per fathom. The stope north is worth 45 cwts. per fathom. The stope in the 41 south is worth 40 cwts. per fathom. The 10 going south of No. 2 winze, south of Dobie's junction, is worth 35 to 45 cwts. per fathom. Stope in this level, north of No. 1 winze, is worth 45 cwts. per fathom. In Gripp's adit, south of said junction, we are cutting into the west or footwall side in search of more lode. A considerable quantity of water is flowing out of the cross-cut. The stopes in back of this level not far from the end is worth 40 cwts. per fathom.—Raik Vein: Pitch above Gripp's, south of Reid's shaft, by four men, at 90s. per fathom; worth 20 cwts. per fathom.

MARKE VALLEY.—Wm. George, June 17: Wheal Jenkin: The shaftmen are getting on very satisfactorily since the commencement of their bargain to sink 12 fms., cut top and tip-plats as reported. In sinking, a small branch has crossed the shaft underlaying from the lode containing good spots of copper; this will probably be seen at deeper levels. There is no change of importance in the 15 cross-cut south; water is still issuing strong from the end. The lode in the winze sinking below this level is worth 8*l.* per fathom, but there is an increase of water, which rather impedes the progress. The stopes in back are turning out just as last reported. We purpose selling a parcel of tin to-morrow.

MELLANEAR.—John Glibert, June 17: We have intersected in the 70 cross-cut driving north of main lode east of Gundry's engine-shaft several small branches of spar, which are spotted with mundic and blende and letting out a little water. The ground is congenial for mineral and easy for driving. The lode in the 110, driving west of Gundry's shaft on the main part, is 5 ft wide, yielding saving work for copper and tin ores, and still looking promising for an improvement. In the 110, driving east of shaft on the main part, the lode is 3 ft. wide, yielding occasional stones of copper ore, and is also worth 5*l.* per fm. for tin. The lode in the 120, driving west of shaft on main part, is 4 ft. wide, yielding good stones of copper ore, and is worth for tin 8*l.* per fathom. In the 120, driving east of shaft on the main part, the lode is 3 ft. wide, composed principally of mundic and blende, and yielding ½ ton of copper ore per fathom, and occasional stones of tin. The part of the lode carrying in the 130, driving east of shaft on south part, is 5 ft. wide, yielding 2½ tons of copper ore per fm. and some saving work for tin, and letting out a large stream of water. In the 130, driving west of shaft on the south part of the lode; since this level has passed the small cross-course the lode is better defined. The part now carrying is 4 ft. wide, yielding some saving work for copper ore, and is also worth 8*l.* per fathom for tin, but there is more lode standing in the south side of the level, which we have put the men to cut through to prove its value. In Gundry's engine-shaft to sink below the 130 fathom level, on the north part, the lode is 4 ft. wide, and yielding 1½ ton of copper ore per fathom; we shall force the sinking of this shaft as fast as possible. We have set 20 pitches to 44 men at an average tribute of 11s. in 1*l.*

MID-DEVON.—James Neill, June 13: A shaft sunk by 12 men with rock-drills and by hand labour 2 ft.; total distance below the 90 fathom plat, 8 fms. 3 ft. 4 in. There is no material change in the rock. Water is still issuing freely from the bottom of the shaft. The pumping machinery is working satisfactorily, and copes with the water easily. The surface water is still sufficient for all requirements.

MOUNTS BAY CONSOLS.—W. Argall, T. Job, June 13: The lode in the 20 end is a little disordered, and consequently the lode is not so good. We put in stull in back of 20 level, and by the next report we hope to say more about the tin stoping ground in this direction. Machinery working very well, and in the coming week we shall sell our monthly parcel of tin.

NEW CARADON.—N. Richards, June 17: The cross-cut south at the 60 is being forced on as fast as possible. We have set the men 5 fms. stent, at 4*l.* per fm. with the view of reaching the lodes as early as possible.

NEW LANGFORD.—Thomas Gregory, June 17: The lode in the 10, west of engine-shaft, is 2½ ft. wide, with a branch of prian, white iron, and silver-lead 4 in. wide, which is being carefully saved. The lode in the 30, west of engine-shaft, is 3½ ft. wide, composed of friable quartz, blende, and mundic, spotted with silver-lead, and letting out water freely—a very fine-looking lode. There is no other change to advise you of. Machinery, &c., working well.

NEW KITTY.—William Vivian, June 18; The 20 fm. level driving east has very much improved in appearance during the past week; the lode is of a porous nature, and letting out water freely. No change to notice in the other parts of operation since last report.

NEW TERRAS.—Richard Eade, June 18: All surface work progressing satisfactorily. The weather is all we could desire for the masons, and they are making the best of it. The engineers are at Halviggan getting out the engine. We hope to remove the whole of it to New Terras in course of the next fortnight. We are also busy carting granite for the buildings.

NEW WEST CARADON.—N. Richards, June 17: The last lode cut in the 38 cross-cut south is now over 2 ft. wide, and will produce fully 1¼ ton of good yellow copper ore per fm., and looks at present as if it would further improve. A small box of the ore I have to-day forwarded to the office for your inspection. There is no change in the No. 5 lode west at this level, consequently I have taken the men from this level for a few days, and placed two of them with the other men who are engaged driving east on the new lode, thus increasing the number to 6, the other two have to-day been opening out west a little; we find there is ore in the lode but cannot as yet say much about it, as it is in the cross-course.

NORTH GREEN HURTH.—J. Polglase, June 11: The No. 1 vein east looks very promising. No change in driving west on No. 2 vein. We have accepted the lowest tender for tramming the stuff from both the adit ends at 10s. 6d. per fathom.

NORTH TRESKERBY.—Pryor and Son, June 17: Saturday last being our pay and setting, when the following bargains were set:—The deep adit level to drive east of cross-cut, on No. 1 lode, by four men, at 5*l.* 10s. per fathom, in a lode 3 ft. wide, and worth 15*l.* per fathom. This level to drive west of cross-cut, by six men, at 6*l.* per fathom, lode 4 ft. wide, and worth 26*l.* per fathom. The deep adit level to drive east of cross-cut, on No. 2 lode, by four men, at 4*l.* per fathom, lode 2 ft. wide, and worth 15*l.* per fathom. The deep adit level to drive west of cross-cut, on No. 2 lode, by four men at 4*l.* per fathom, lode, 2½ ft. wide, and worth 17*l.* per fathom. The deep adit level to drive west of cross-cut, on No. 5 lode, by four men, at 4*l.* 15s. per fathom, lode 3 ft. wide, and worth 15*l.* per fathom. To drive the shallow adit level east of Highburrow shaft, on No. 1 lode, by four men, at 4*l.* 15s. per fathom, lode 3 ft. wide, and worth 14*l.* per fathom. We have taken the men from No. 4 lode, east of cross-cut, and put them to drive east of the shallow adit cross-cut on Snell's lode, which is 4 ft. wide, and worth 16*l.* per fathom, driving by four men at 6*l.* per fathom. This lode is all in whole ground to the east and west of this and the deep adit.—Baron's Engine-Shaft: The 36 cross-cut to drive south of shaft, by six men, at 8*l.* per fathom for 2 fms., or to cut through the lode, which is producing good quality copper ore, but the present end continues to let out a large stream of water, which makes the progress slow for cutting through the lode. The 24 to drive east of the 24 cross-cut, by four men, at 8*l.* per fathom, lode for part carrying 3 ft., and worth from 4 to 5 tons of copper ore per fm.—Stamps: Engine-house and stack are now finished, and the engineers have fixed the bob of the engine, and are now engaged in getting the other parts of the machinery in their respective places; every effort is being made to expedite this work.—Boilers: Good progress is being made with Nos. 2 and 3.—Floors, &c.: We have a good staff of men engaged in this work, laying in foundations for stamps, &c., preparing water-courses to and from the various buddles, and the other necessary work, which is being pushed on as fast as possible—in fact, every possible means are being made to get the stamps to work.

PAR.—T. Parkyn, June 18: We have made great progress in the rise considering the foul air owing to the hot weather. I expect, however, with a little dynamite to hole the shaft to-day or to-morrow. It must be very close, as we can hear the sounds at surface. We have pegged down for the foundations for engine and boiler house, &c., and hope to commence them at once. I have inspected several engines, and will close as soon as I can find the most suitable one for our purpose. We have splendid weather for our operations.

PATTERSYKE AND CLARGILL HEAD.—John Peart, June 12: The drift going south from Archer's rise in St. John's vein has improved this week, more mineral and small pieces of lead and copper ore, altogether the vein looks very much better. The men in top level are getting part ore, but not rich, it makes nice bouse, and will pay well for working. The level at Allensclough has been closed for several fathoms, but is looking more open, so that I expect in a little time we may get to the vein.

POLBERRO.—William Vivian, June 18: We are clearing a cross cut south of the engine-shaft. I have no doubt by a continuation of this cross-cut we shall meet with the Pink lode, which is already discovered at Trevaunance Mine, and about 25 fms. in length opened up in a good course of copper ore.

POLCREBO TIN.—W. H. Martin, J. Richards, June 17: On Saturday last we set the following bargains:—Highburrow Shaft: At the 90 we set six shaftmen to cut ground, north of the shaft, for winze tackie and barrow-road, all complete for sinking below the 60; contract 10*l.* To drive the 60 east end, by six men, at 4*l.* per fathom. To drive the 50 east end, by six men, at 5*l.* per fathom.—Tribute: Pitch in back of 30 west, by two men, at 12s. in 1*l.* Pitch in bottom of 30 east, by two men, at 13*l.* 4d. in 1*l.* Pitch in back of 40 west, by four men, at 12s. in 1*l.* The lode in the 50 east is the strongest masterly looking lode we have seen; for the last few feet it is highly charged with mundic. We have not seen such lumps of mundic before in this mine. Seeing such a quantity of mundic, and such a fine lode in this level gives us great encouragement for the 60. In the 60 east we have cut a small stream of water, and the lode is looking better. In cutting the plat north of the level the ground is full of branches (one is 1 ft. wide, and produces tin), and for the whole width there is no country rock.

PRINCE OF WALES.—S. Roberts, June 17: We have completed the shaft for winding from the 45, and are now pushing on the cross-cut south towards the main lode as fast as possible, and will now commence with another pare of men to cut a plat and a roadway around the engine-shaft from westward, in order to drive in that direction on the new lode. The tribute department is without change since last reported.

ROMAN GRAVELS.—A. Waters and Son, June 13: We have just come from below ground, and beg to report on the ends and other points as follows:—The 125 going north towards flat-rod shaft and towards the junction of the east lode shows a vein 6 to 7 ft. wide, nice white calcspar and lead ore, worth 1½ to 2 tons per fathom. The 125 south is also going forward on a wide sparry orey lode, worth 2 tons per fathom, and improving. The 110 south is up to where the lode is split into three divisions, not very productive at present, but we ought to have, and believe we shall, a good run of ore here again soon. The 95 south shows a strong vein to-day (a separate and distinct division from the big spar lode), which looks like the middle course driven upon in the 65, and which was rich in ore for a considerable distance. We have stated before that the south or shale bunch must be standing beyond the 110, 95, and 80 ends, and everything to-day seemed very convincing on this head. Stopes without much change since our last monthly report. Samples of 100 tons lead ore and 70 tons blend go out by this post, for sale next week.

SOUTH DARREN.—John Mitchell, June 18: The shaftmen have made about the usual progress in sinking for the week; there is no change in the ground. The 130 stope east has got rather poor, so we will put the men to stope down from the 120, where the lead is better. This they can conveniently do, as they are stoping from the end of the winze, down which they will throw their ore-stuff. The other stopes are producing about the usual quantity of ore. Saturday next being setting day, a full setting report will be sent you next week. The 25 tons of silver-lead ore sold on the 12th inst. realised 311*l.* 17s. 6d.

SOUTH CARADON.—W. George, June 17: Setting Report: Kittow's Shaft: The lode in the 180 is 1 ft. wide, yielding 1 ton of ore per fathom; set to six men, at 10*l.* Two stopes are set in the back of this level, each to four men, at 3*l.*; worth 3½ and 2½ tons of ore per fathom. To drive the 170 east by two men, at 4*l.* per fathom; here, as referred to last month, since passing through a small cross-course the lode has been small and disordered, but producing a little good quality ore. Three stopes are set in the bottom of this level to four men, No. 1 at 3*l.* 10s., and Nos. 2 and 3 at 2*l.* 5s. each, worth 2½ tons of ore per fathom. A rise in the back of the 170 is set to two men, at 7*l.*, where the lode is worth 3 tons of ore per fathom. Two stopes are set in the back, each to six men, at 3*l.* 5s. and 3*l.* per fathom. No. 1 will yield 2 tons, and No. 2 3½ tons of ore per fathom. To stope the bottom of the 180 by four men, at 3*l.* 10s.; yielding 2½ tons of ore per fathom. To stope the back of the 160 by six men, at 3*l.* 5s.; yielding 2½ tons of ore per fathom. To stope the back of the 150 by four men, at 3*l.* 5s.; lode yielding 2½ tons of ore per fathom. To drive the 120 east by two men, at 4*l.* 10s. per fathom; here the lode is at present small, and thinking it probable there is another part to the south of that being driven on, we consider it advisable to drive a short cross-cut for proof. One stope is set in the bottom of this level to four men, at 3*l.* 10s.; worth 2 tons of ore per fathom. Two stopes in the back to four men in each, at 2*l.* 15s. and 3*l.*—No. 1 yielding 3 tons, and No. 2 2½ tons of ore per fathom. There are 23 tribute pitches set to 51 men, at 8s. 6d. to 13s. 6d. in 1*l.* We have sampled, for sale to-morrow, computed 390 tons, including a parcel of slimes.

STANDARD LEAD.—W. N. Borlase, June 18: The lode in the south end of the new shaft is of the most kindly appearance, although not producing so much lead as reported last week. The walls diverging, and the lode is now over 3 ft. wide, producing blende throughout, about 3 tons per fathom, with a good mixture of lead. I fully expected the lode to have improved in the last sink and taking down, but I find to-day the north end has suffered great contortion, which apparently forced the contraction referred to in my previous report back a little towards the south end, so that the dip of the improvement has not had a chance to lengthen as we could wish. I hope soon to see an improvement also in the north end. The lode in the stope, south of the shaft, is not producing so much blende, but about the usual quantity of lead—2 tons per fathom. I have to-day resumed working the east and west lode, at the 45 fm. level; lode producing as fast as possible, and I hope to start the new wheel sometime next week. Lead ore sold to-day to Messrs. Walker, Parker, and Co. for 7½ 1s. per ton.

TREGONTREES AND OLD POLGOOTH CONSOLS.—Captains Parkyn and Tonkin, June 18: Since our last report we are pleased to say that Stone's stope has improved and the lode is large. The stope immediately east is just as last reported on. Stope No. 3, no change to note. The lode in the deep adit going east shows signs of improvement. We have to-day commenced burning the tin. Everything is going on well.

TOLGULLOW UNITED.—George E. Tremayne, June 17: The 80 fm. level, driving west of Trefuse's shaft, continues worth for tin and arsenical mundic from 15*l.* to 20*l.* per fm. A stope in the back of this level is worth for tin fully 25*l.* per fathom. The lode in the winze, sinking below the 65 fathom level, west of Trefuse's, is worth 10*l.* per fathom for the part carried. Two stopes in

the back of this level are worth for tin and arsenical mundic 15*l.* per fathom each. In driving the 65 fathom level cross-cut north we have not as yet intersected the main part of the lode. Two stopes in the back of the deep adit level, west of Broad's shaft, are each worth for tin 20*l.* per fathom. The lode in the shallow adit level, driving west of Broad's shaft, is 3 ft. wide; a strong promising, well defined lode, with a leader of tin. The tribute department continues to yield its usual quantity of tin. All other operations are progressing in a very satisfactory manner, and the engines and pit-work working well. We sold on Monday last 10 tons 6 cwts. 3 qrs. 24 lbs. of black tin.

TRESAVEAN.—J. Prisk, W. Edwards, June 15: The shaftmen have completed the cutting grounds for bearers for the drop lift, and are at present engaged in fixing the temporary drawing lift at the 146, which will be completed to-morrow, and on Wednesday we hope to send the drop lift to the 160, or below; if we find the shaft clear we shall then send down one if not two pieces of main rods, and when these are connected we shall go on forking towards the 166 at a rapid rate, and every effort is being made to reach this level as soon as possible, as we shall then be nearing the tin ground.—Cunnack's Shaft: In the 24 level east the drivage is being continued in a south-easterly direction, and judging from the change of ground which has taken place in the last few days, we consider we are very near the lode. The tribute pitch in the bottom of the 12 is looking exceeding well, worth 15*l.* per fathom, and in the bottom of the winze the lode is worth 25*l.* per fathom; we hope to resume operations here in the present month. The tribute pitches at Wheal Boys are about the same as usual. We are burning and dressing for the next sale of tin to be made on Thursday next. The 90 in. engine and all other machinery is in good condition and working well.

VAN.—W. H. Williams, June 18: The 150 fm. level cross-cut south at Edwards' is set to nine men, at 90*s.* per fathom. This cross-cut is now driven 32 ft. The 135 fm. level cross-cut is driven 116 ft., and is for the present suspended, and the men placed to drive the 135 west, at 120*s.* per fathom; the lode here is worth 2½ tons of lead ore per fathom. The stopes are without change, either in produce, width, or price. The total number of stopemen are 27, and are breaking about the usual quantity of orestuff. The ore ground in the back of the 75 east is still extending. All surface work is going on regularly. We have done the repairs to the boilers, which will result in the saving of coals. Last week I made a special survey of the western end at surface, and I think I have quite solved the problem why we have such long cross-cuts south at the 135 and 120. It is quite clear to me that we have four different lodes, forming a junction on the western part of our sett, each of which I have traced. We have (1) the main lode or Penelyn lode, (2) a lode running from north-west to south-east, (3) another south-west to north-east, which east of Seaham's shaft in leaving the main lode produces copper, and a north and south lode, which I can point out at surface for over a mile in length, and lead producing. No. 2 lode can be plainly seen at surface in the old ballast quarry, from which also we have several times broken stones of ore. These several lodes in their junction have produced the great riches already returned from this mine, and concentrate again as we go deeper. I think it is only very reasonable to expect that we may look forward to a return of the good old times. It is my honest and candid opinion that we have yet in old Van as good a mine, every bit as good as we ever had, and I base my opinion upon the steady improvement of the lode as we go deeper, which opinion is backed by every mining engineer who has seen the place, as well as by whose who are now in their graves, and who did not have the advantages of seeing what we now see, among whom I may name my late father; Capt. Hitchens, of Devon Consols; and Capt. Goldsworthy, manager of Pelnyclyn Mine. I almost forgot to say that I shall have 100 tons of blende ready for sampling on Tuesday next.

WEST CARADON.—N. Richards, June 17: There is no change to notice in Gilpin's lode in the 38. It is about 1 ft. wide, a kind-looking lode but poor. No. 5 lode east at this level is large, but is now very irony, and consequently unproductive.

WEST POLBREEN.—William Vivian, June 18: The 40 fm. level, driving west on the flat lode, is of a very promising character. I have every reason to believe that we shall have a good mine here in depth. I am offered nine second-hand 36 and 40 in. engines. I am told some of them are good engines. I shall begin to inspect them in a few days, and have no doubt we shall have a good bargain.

WEST WHEAL PEEVOR.—Joseph Pryor, John Angove, June 17: We cannot report any particular alteration at any of the points of operation except in the 48 west; here the lode is improving, and is now producing saving work for tin. We shall be able to say more about this next week, when a full report will be sent.

WHEAL CREBOR.—Henry Phillips, P. D. Holman, June 16: The lode in the 144 driving east of new shaft, will yield 3 tons of arsenical mundic spotted with copper ore per fathom. The lode in the 144 driving west of new shaft will yield 1 ton of copper ore per fathom, also it contains arsenical mundic, but not to value. Our stoping ground in the back of 144, west of new shaft, Nos. 1, 2, 3, and 4, will yield in the aggregate 29 tons of copper ore and 12 tons of mundic per fathom. The stope east of winze, sunk in the bottom of the 132, will yield 6 tons of copper ore and 2 tons of mundic per fathom. The stope west of said winze will yield 6 tons of copper ore and 2 tons of mundic per fathom. The stope in the back of the 132, east of winze, will yield 3 tons of copper ore, and 4 tons mundic per fathom. Good progress is made in rising in the back of the 72 to communicate with the 48 east of new shaft. There is no change at any other point since last reported.

WHEAL METAL AND FLOW.—William Argall, Stephen P. Curtis, June 17: Engineers are making fair progress in fixing the engine. The shaftmen have fixed main rods and nearly completed the fixing of the pitwork in Watson's shaft, and shall finish the pond or large reservoir in a few days. We expect to tart the engine by the end of this month.

WHEAL PEEVOR.—Joseph Pryor, H. King, June 17: We cannot speak of any particular change in the various points of operation on the new and south lodes. At Peevor bottoms every exertion is being put forth to clear up the shaft as soon as possible. The workings continue to be the same size, thus showing that large quantities of tin must have been raised in the former workings. We hope to speak more of this important point next week, when a full report will be sent.

FOREIGN MINES.

ALMADA AND TIRITO.—Mr. Clark, May 14: Since last report we have discovered some black and green ore in Providencia above tunnel level upon which we are driving north. This is a pomising point, there being a long stretch of unexplored ground lying to the north, and the lode is strong. There are also some old pillars which will pay to work now. We have ore in sight for a while, with good prospects of finding more. In Guijas old workings have been struck, and this point does not now look so favourable. We are stoping north of the No. 1 winze on green ore. We shall not do any more dead work until further orders.

— J. Ruy-Sanchez, May 19: Smelting is going on well, and 802 bars pig-lead have been produced containing silver of an assay value of 87083.

BIRDSEYE CREEK.—The directors have received the following telegram from J. S. Godwin:—Will complete clean-up on July 1st. I send you a remittance of 82000.

BRATSBERG COPPER.—John Daw, A. W. Daw, June 12: No. 2 adit since our last report has improved considerably, being now worth 6*l.* per fathom, and is looking very promising for an improvement. The eight stopes in back are yielding their usual quantities of ore, present average value 8*l.* per fathoom. The winze being sunk in bottom of the adit to meet the No. 3 adit by the time it reaches this point is now worth 9*l.* per fathom. The rise being put up with the boring-machine continues in a strong lode, worth 8*l.* 10*s.* per fathom. We have six stopes working in the bottom worth on an average 8*l.* per fathom. The mid-level we value at 7*l.* 10*s.* per fathom. No. 3 adit has also improved, being now worth 13*l.* per fathom. The stope in back we value at 9*l.* per fathom. —Daw's Section: We are making preparations for starting a level from the bottom of this section to meet the 25 from York's, which is expected to open a large extent of valuable ground. There are three stopes working at the present time here worth 8*l.* 10*s.* per fathom on an average.—York's Section: We are glad to be able to inform you we have broken through the bar of ground which stood in the line of the shaft between the 25 and 40, thereby preventing our finishing the skiproad down to the latter. The skiproad has been completed, and we are now drawing from the bottom of the shaft with the large drawing engine. Two large hoppers have been built below the 40 to facilitate the hauling of and for receiving the orestuff. We hope shortly to be in a position to resume sinking the shaft. The 40 west is now worth 9*l.* 10*s.* per fathom. The 40 east has been temporarily suspended, whilst the skiproad was in course of construction. This applies also to the stopes around the shaft below the 25. The 25 we value at 11*l.* per fathom—a very fine lode. We have seven stopes working in the back worth 8*l.* 10*s.* per fathom on an average. The 10 fm. level is now being driven in a good lode worth 8*l.* 10*s.* per fathom. We are putting up a rise in the back to lay open stoping ground value 9*l.* per fathom. The 40 east and west is worth 6*l.* and 10*l.* per fathom respectively. There are three stopes in the back worth 9*l.* per fathom. All the surface operations are going on satisfactorily, and the machinery is in good working order as well underground as at surface. The Bratsberg has taken out the greater part of the ore stocked at Bandagsiie during the winter. The first cargo of this ore has been shipped to Newcastle in the Mary Owens, and we are trying to charter the John Evans to take a cargo to South Wales. Another cargo will follow soon after. As the price of copper continues so low we have given the workmen a notice of a reduction in wages from the 1st July.

CALLAO BIS.—The directors of the Callao Bis Gold Mining Company have received advices from Mr. W. Bell Davies, dated May 11, as follows:—"The new lode has come in from the north, and bears the same course as the Callao. Capt. Richards it is now opening out with all speed. From present appearance of the end of Panama level, and from the bearing of the Callao lode, the vein we have now cut is in all probability not the Callao lode itself, but a branch—the main vein going west of No. 3 shaft.

HORNACHOS SILVER.—Report for May: The eighth level north was driven 3 metros 10 centimetres in a lode yielding 7 cwts. of silver-lead ore per fathom. The same level south was driven 1 metre 40 centimetres, the lode yielding 4 cwts. of ore per fathom. The seventh level south was driven 2 metres 90 centimetres, in a lode yielding 7 cwts. per fathom. The sixth level south was driven 3 metres, the lode producing 6½ cwts. per fathom. In the back of this level there were four stopes at work, which produced a fair quantity of ore, varying in yield from 4 cwts. to 21 cwts. per fathom. Two stopes in the fifth level yielded a large quantity of ore, most of which averaged 17 cwts. per fathom. In the fourth level north one stope gave 18½ tons of ore, the yield being at the rate of 11½ cwts. per fathom. In two stopes in the third and second levels the lode yielded 4½ cwts. per fathom. The average yield from all points is 12 cwts. of ore per fathom, which realises 18*l.* per ton net at the mines.

JAVALI.—G. E. Chambers, May 5: I beg to hand you the following report of the past month's working. As regards actual quantity of gold, I regret to say it is a bad one; but, still, it gives me great pleasure to see so very good an average yield per ton, more than we have had since 1875. This is more especially important as the greater part of the quartz supply came from the sinkings, and by showing so good an average gives a splendid prospect for the deep workings. —Mine: Pini's tunnel progressed 1½ varas; as I before mentioned, I have stopped driving until the lode be proved by the cross-cut. The cross-cut was driven 4½ varas; I hope next mail to be able to report the discovery of good stuff, and the appearance of the lode is very favourable. The level to east from Seemann's shaft was driven 3½ varas, and the level to east from Teodulo's shaft 2¼ varas. The quarts supply came from the following places:—West sinking yielded 209 tons; east sinking yielded 203 tons; Nispero No. 3 stope yielded 110 tons; Dolores stope yielded 111 tons; level from Seemann's shaft yielded 27 tons; level from Teodulo's shaft yielded 15 tons; Concepcion Manto yielded 15 tons. The timbermen are occupied in strengthening and repairing the different levels, trams, &c., and in general preparations for the wet season.—Mills, La Fé: Owing to the Easter holidays the 20 stamps only worked 18 days, crushing 665 tons, which yielded 244 ozs. of gold, making an average of 7 dwts. 8 grs. per ton. I am still repairing all through the mill; we have now completed three batteries with new mortar-boxes, guides, &c. This month we shall have a few days stoppage to put down a new piece of main shaft. The new arrangement for the turbine has not yet arrived; but in order to be prepared for rain I shall put the turbine into good order, with the new brass linings and upon the last system—brass socket and steel pivot—which up to now have worked well.

La Esperanza: Not having water this mill did not work, and the opportunity was taken to thoroughly repair the stamps, crusher, &c. The new turbine from New York has just arrived, and will be put in its place this week. By appearances I think we may anticipate some rain about the 15th, if only for four stamps. —La Caridad: One arrastra worked 22 days, and yielded 15¼ ozs. of gold. The turbine here has to be seen to—this I shall also do this week. The total remittance consists of 260 ozs., which makes a total average yield per ton of 7 dwts. 19¾ grs.—Buddlee: One is almost complete. Having to employ the mechanics in the different repairs has considerably retarded the work, but now the ironwork is almost all that is wanting. The belting has not yet arrived, and by the present way of freight transit I fear will not be here just yet.—Receipts and Expenditure: The expenditure was 377*l.*; the remittance is valued at 650*l.*—Health and Labour: The heat is very great; it may be only imagination, but I consider this the warmest dry season we have ever had. As regards scarcity of water, it certainly is, as before Esperanza mill has always been able to work in April with at least two stamps. I can only trust that we shall be recompensed with a good wet season, in which case, with our present quality quartz, good results may be expected.

KOHINOOR AND DONALDSON CONSOLIDATED.—Alfred Rickard May 28: Champion: The orebody in the 680 or bottom drift east continues to open out well. We are getting from the drift and stope quite a large quantity of good milling and smelting ore. This same orebody in the winze coming down from the 600 is turning out splendidly. I have rarely seen a finer run of ore in this district. The other points operated do not show any change to notice, but the supply of ore for the mill is being kept up very regularly at the rate of about 35 tons per day. The fine mineral found in the bottom drifts makes us very anxious to sink the shaft and get deeper. The said drift are not more than 350 ft. vertically from the surface, and to all appearances we are just at the point in this mine where the cap has been got through, and we begin to find larger and more permanent orebodies. We shall have about 50 tons of smelting ore in this month's production, and we are working at profit. The mill has been running steadily, and with a good supply of ore for the 50 stamps. We have retorted 108 ozs. of gold since the 14th—a rather low return, but we expect to see an improvement in the clean-up.

LA PLATA MINING AND SMELTING.—Returns for the first half of the month:—Ore received from the company's mine, 300 tons; total ore received, 1500 tons; ore smelted, 1500 tons; bullion produced, 150 tons; silver produced, 50,000 ozs.

MYSORE GOLD.—Owing to a change in the time of departure of the mails from Bombay no mining report has been received this week.

NEW ALBION GOLD.—June 5: The working expenses for the whole month (May), including drain, will be paid from product of mine since resuming work (viz., 10 days' run). Everything is looking promising, and preparations are being made for a good yield in June, and by the time we are in full blast, an extra good one for July. Since the receipt of the above, the following cablegram has come to hand from the manager, dated 16th June, showing a highly satisfactory yield of gold from 160 tons of quartz crushed:—Crushed 160 tons of quartz, yield 400 ozs. of gold (valued at over 1600*l.*) It will be interesting to the shareholders to learn that one of the specimens of quartz exhibited at the statutory meeting, and belonging to the late Blue Nose Company, and valued by them at $300, or 60*l.* sterling, has been crushed up by Messrs. Johnson, Matthey, and Co., assayers to the Bank of England, and has yielded, according to their certificate, 38·100 ozs. of gold, valued at 153*l.* 13*s.* 5*d.*

NEW EMMA SILVER.—George Cullins, June 1: We are getting ready to start pumps as soon as possible. Smoke-stacks are being put in place, and some alteration in piping made; also some needed repairs about the boilers. I shall start pumps in a day or so. Snow is melting fast, although some 7 or 8 ft. yet in front and about the works.

NEW HOOVER HILL.—June 3; Report for the month of May: The Briol's shaft is 26 ft. below the 230 ft. level, an advance of 8½ ft.; the vein in the north end of the shaft, is carrying good ore, but the south end is not looking so well. The winze below the 230 north is down 9 ft.; the vein in the bottom is looking well. In the stope below the 170 north the ore broken during the earlier part of the month was lowgrade, but has improved, and is now of good quality.—Hawkins': In the No. 1 stope we are breaking ore worth about $8 per ton. In the No. 2 stope we are breaking ore from the central part of the chimney, where it is worth about $20 per ton. Communication has been made with the open-cut shaft by means of a drift 12½ ft. in length, which greatly facilitates removing the ore. The open-cut shaft has been sunk 34½ ft. during the month. The shallow cross-cut, west of the open cut shaft, at 40 ft. is in 44½ ft., an advance of 36½ ft.; and 9½ ft. have been driven north and south on ore worth from $8 to $10 per ton; the south end is poor, but the north end is in good ore. Driving north of the cross-cut, west of Hawkins' shaft, 135 ft., an advance of 9 ft. has been made; the ground we are passing through is of an encouraging nature. We are doing some work in the new discovery between the Briol's and Hawkins' works without as yet definite results, one way or the other.—Mill: 20 stamps in 26 days crushed 644 tons of ore, producing 341·45 ozs. of gold. I ship you to-day in the usual way bar No. 25; weight, 341·45 ozs.; insured value, $5500.

NORTH MEXICAN SILVER.—O. Hofmann, May 26: Cusihuiriachic: Durano: Pulbrook shaft advanced to 116 ft., which gives a progress of 18 ft. for last week, or 3 ft. per day, which is very quick work. The ledge, 4 ft. wide, changed in colour, is more clayish. Bottom just now in poorer ore.—San Saturnino: The work of straightening and timbering the old shaft is progressing. The pile of ore obtained by straightening the shaft was sampled by me. The ore is not close enough assorted; gave instruction and explanations how to assort. Part of the timber for the horse-whim is up at the mine.—The Gloria: The tunnel entered a distance of 432 ft.; at this point the ledge branches in two—the east branch 18 in. wide, the west branch 8 in. wide. The cause of the branching seems to be a horse in the ledge, which accounts for the poorer quality of the ore. Advised to follow the east branch. Located the place in the tunnel for sinking a winze at a distance of 310 ft. from the mouth. Work of excavating for this purpose, on the west side of the tunnel has commenced to-day.—Santa Rita: The work on the tunnel has been suspended for a few days, as I find it necessary to have a survey made to stake off the exact direction the tunnel has to be driven. The ground just now is in a broken condition, which makes it impossible to follow with surety any streak or ledge.—Madrono: Work continued on the ledge and cross-cut; no change or improvement to be recorded yet.—San Nicholas: Preparations made to commence work in the shaft. I gave up the idea of running a tunnel on the San Saturnino as I found that the difference of elevation for a short tunnel would be only 174 ft., which would be of no service. The centre shaft for working the mines of San Saturnino and Durano is the Pulbrook shaft. Besides the more central location the slope of the hill is by far not so steep as at the San Saturnino shaft, which will permit by dumping the waste rock to form a large level place for the erection of assorting houses. The top of Pulbrook shaft is high enough to run a level track to the other side of the ridge where the ore bins, for the wire tramway will have to be placed. As this shaft will be the principal shaft in the group, I advised the captain to make the same of the proper dimension suitable for steam hoisting, so that in the event of striking water steam hoist and pumps can be erected without changing the dimensions of the shaft. It will be a double compartment shaft, with a third compartment for a ladder-way. The ground permits a very cheap sinking, and we will have a good and proper shaft. The timber for this shaft has been ordered.

OSCAR GOLD.—John Daw, jun., June 10: Oscar Lode: From the returns posted a few days ago, you will see that there is an improvement in the yield of gold per ton of stuff from bottom of mine 2½ dwts. per ton, compared with that taken from the stopes and levels above. In the winze below 25 fm. level the lode improves every fathom sunk. Its composition is chiefly quartz, with a little slate, impregnated with iron pyrites, a little ferric oxide, and occasional spots of visible gold. We are now preparing a 50 ton sample from this winze plone, which will be treated as soon as we connect the new stamps. This sample will be from the deepest point in Oscar—about 30 fms. from surface. All other points in this mine, including the cross-cut, as well as Croft's shaft, remain unaltered.—Daw's: My telegram will have informed you that we have cleaned up our third sample from this reef—82 tons of stuff, which produced 34 ozs. of gold. Of these 34 ozs. 32 ozs. were from the mortar-boxes and plates, and 2 ozs. from the silver in the cripples. This shows an increase of 3 dwts. per ton on the two former samples. I am glad to say we are now running 20 heads on the stuff from this reef alone, and shall increase this number as the mine gets developed. It is important to note that the lode increases in width, as well as in value, as we get away from surface. To-day we have visible and rich gold several places in bottom of the shaft. The reef goes down perpendicular, with two well-defined walls.—Erections: These—the additional 30 heads of stamps—will be completed this month, we shall then be in a position to treat all the stuff we can at present procure from the lodes already opened on. We have to-day sent to our bankers in Christiania (Messrs. Th. Job Heftye and Son) three bars of gold, weighing together 90 ozs.

OURO PRETO GOLD.—May 20: Rapasos Mine: The reports and news which have been received from this mine are satisfactory, and give testimony of a considerable amount of work which was done during the month, notwithstanding the Easter holidays in the first week of the month, when the attendance of labour was rather slight. Fair duty was performed in the mine. The deep adit advanced 10·30 metres, and is progressing favourably.—Middle Adit (formerly called Shallow adit): The Sarilho lode has been pierced by it. The forebreast is in country rock mixed with veins of lode matter.—Mina Grande Adit: The bottom has been stoped 39·70 metres, and a tramway laid down, which will have reached the shaft by this time. The level north in Mina Grande, horizon of middle adit, was advanced ½ metre. The lode commencing small opened rapidly. By the latest advice it is occupying the entire face of the forebreast. Samples have given a fair prospect of gold in the batea.—Antimonio South: When I was last in Raposos examining the place around the Antimonio excavation in the middle adit, a vein of handsomely-looking pyritous ore was noticed making south in the hanging-wall of Antimonio. The mine captain was instructed to drive on this vein when he could spare a few hands. It was done during the month, and seems to have led to the discovery of a fair body of ore. The Canal shaft from surface was a mere hole brought down on the Canal shoot. It has been squared and timbered for the transmission of the ore from the Mina Grande shaft, and for receiving the wire-rope from the horse whim to the pump. Horse whim is in course of erection. I hope to hear soon that it is finished, and that the Canal shaft below the adit is in f ork.—Construction: Reservoir: About 36 men have been employed at this work daily, and on the average during the month, and good progress has been made.—New Stamps: The excavation for a site is progressing. A good deal of timberwork for the wheel, &c., is cut out.

Passagem Mine: The lode is good at all the ends and stopes, though there is no particularly rich spot in sight at present. The stope between the 190 and 150 south-west has somewhat declined in quality. The lode got pierced by a wedge of slate, which split it in several parts; there are, however, indications of the lode being strong at this point, for there is good lode under the floor of the stope all the way. When the 215 south-west gets advanced to that distance it is intended to drive a cross-cut level towards west, until the footwall of the lode is reached; the thickness of the lode will then be known. The lode in the 215 north-east improved towards the middle of the month; it is fairly productive. The sinking of shaft No. 2 is advancing slowly, the ground being very tight for quarrying.—Shaft No. 1: Sinking was resumed in order to lay dry the end in the shaft, and to be ready at any time to drift in the lode from that end, it being the deepest point at which the lode is opened—232 metres from surface down the shaft.—Construction: 12 stamps; since the delivery o fthe heavy logs of timber, which were required for the uprights of the new mill, a good force has been working on it. In a month's time from date it should be about ready for work; it will be a substantial, good, and lasting work.

RUSSELL GOLD.—The managing and mining superintendent, in a letter dated June 2, 1885, writes as follows:—We are at work on Riggon Hill with 20 men, and taking out splendid ore, which will mill from $15 to $50 per ton. The assays to-day gave us $248·4 per ton. All is very free, and pans well. Since my last I have opened a new lead on Riggon Hill, which is about 4 ft. wide, and the best ore yet found, and plenty in sight. I crushed and amalgamated 2 lbs., which gave $70 per ton, and another sample of 4 lbs. gave $37 per ton, not picked ore. All the ore prospects well, and will mill splendidly. In a subsequent letter, dated June 5, 1885: We are making good progress with everything. We have all our force on Riggon Hill, and taking out 10 tons per day—average not assayed, but will mill that. We are working two leads, one 4 ft., the other 1 to 3 ft., all good ore. Will commence sinking soon in Big cut on Riggon Hill, but have plenty of ore to stope for three or four months. This is a big mine of itself—in fact, we do not know big, for it proves better the lower we go down.

RUBY AND DUNDERBERG CONSOLIDATED.—June 16: Dunderberg: There is nothing new to report, 11 tributers at work; no ore shipped during the week.—Lord Byron: The new shaft is being sunk as fast as possible; progress this week 20 ft., total 74 ft. below the Tunnel level. The tributers who are now working at the bottom of No. 1 cave are also the contractors for sinking the shaft, and they are now devoting nearly all their time to the shaft, consequently there is very little ore being mined at present in that part of the mine. There is no change to report in the ore stopes at No. 1 cave as there has been so little work done during the week. The stopes in the back of No. 2 cave are producing ore of fair grade in paying quantities. There are 20 tributers at work, and 21 tons of ore shipped during the week.—Home Ticket: The end of the bottom drift shows an improvement; we are now drifting through a large mass of low grade ore and iron, with small bunches of good ore intermixed through the whole body; progress this week 7 ft. The 300 ft. level continues hard; progress this week 7 ft. Eight men in all at work at the Home Ticket and 300 ft. level.

— June 16: Copy of telegram received from Eureka to-day: 37 tons ore shipped; 15 tons smelted, producing to company $111. No change in the mines since report of 25th May.

SPANISH COPPER.—G. Scott, June 9: Overburden removed during May 2434 wagon-loads, as against 3280 in April. Mineral broken from the new open-cast 140 tons, assaying 3 to 16 per cent. of copper. Since my last the overburden has been removed as far back as San Enrique shaft, and it is open on the north-west side to a depth of about 3 metres from surface. I shall endeavour to get all the wood out of that shaft, and use it for San George, which has been lowered about ¼ metre more.

UNITED MEXICAN.—Mr. Hay, Guanaxuato, June 1: El Diamante: We have driven on 23rd May in the cross-cut of St. Paul 2 metres; total, 84 metres. The ramification of quartz still continues. In the first drift of St. John west we have driven on the 23rd ult. 4·20 metres; total, 119·65 metres. On 23rd ult. we have driven in the cross-cut to the bajo of St. John 2·75 metres; total, 42·35 metres. These two workings of St. John are in the same state they were in at the date of my last report.—San Cayetano de la Ovejera: On the 23rd ult. we have driven in the 15th drift of St. Andrew east 2 metres; total, 54·95 metres. As this end is still unproductive, and the vein is very narrow, we have abandoned it. In the 16th drift of St. Andrew east, we have driven on the 23rd May 3 metres; total, 45·70 metres. The vein is 50 centimetres broad, and we begin to find in it a little ore of a fair class. In the 17th drift of St. Andrew east we have driven on the 23rd ult. 2·50 metres; total, 20·85 metres. The ore is ramified over the width of the lode, which is 50 centimetres. We have driven on 23rd ult. in the 18th drift of St. Andrew east 1·70 metre; total, 7·30 metres. The vein is 40 centimetres broad, and there are appearances of ore. We have sunk on 23rd May in the first winze of St. Andrew 3 metres; total, 147·21 metres. The lode is 50 centimetres broad, but the quality of the ore is less good than hitherto.

On the 23rd May we have sunk on the 2nd winze of St. Andrew 1·80 metre, total 187·92 metres.; the vein is 80 centimetres broad, 40 of which are in good ore, but on the northern side of the winze the ore is of a lower class. In the 5th winze of St. Andrew we have sunk on 23rd May 2 metres, total 97·45 metres; as yet no ore is found at the bottom of this winze. We have sunk on 23rd ult. in the 11th winze of St. Andrew 2·85 metres, total 53·55 metres; the lode has a width of 70 centimetres, of which 30 centimetres are of a better quality of ore than the rest. In the 12th winze of St. Andrew the ore has improved a little, and the lode is 50 centimetres broad.

We have sunk on the 23rd ult. in the 13th winze of St. Andrew 2·55 metres; total metres, 7·80. Work has been stopped in this winze on account of its holing in the 16th drift of St. Andrew east, and on the lateral inclination of the vein the ore has given out. We have sunk on 23rd May in the second winze of St. John 2 metres; total metres, 8·70. We have sold in public sale on 28th May about 320 cargas for 89827, and we have remitted to Duran during the week ending 30th ult. 309·1 cargas, and making a total of 629·1, and of hacienda ore. Included in the amount sold is the ore thrown down in the stope of St. Andrew—four cargas, sold for 8405, and 45 cargas sold for 81624.—Santa Monica: We have driven on 30th May in the cross-cut of St. John south 4·35 metres; total metres, 88 95. There is no change in the appearance of this end. On the 30th ult. we have driven in the cross-cut of Ano Nuevo 2·45 metres; total metres, 42·45.—San Antonio de la Ovejera: Returns from the Mine of San Cayetano de la Ovejera for the week ending 30th May, 1885, $10,787·63; outlay, $4255·23.

VIOLETA GOLD PLACER.—The manager in Spain has telegraphed that sluicing for gold is now in active operation at several points. Many more sluices will be started shortly, as soon as the large iron tubes are fixed, and the company will then be in a position to treat the large quantity of 1000 tons of gold gravel daily. The executive of this company deserve great praise for the prompt manner in which they have got into active operation, as it is less than three months since the company was formed, and in that period a very large amount of heavy work has been accomplished, including the cutting of the water course through the solid rock, building sluiceway, &c., in the course of which thousands of tons of stone have had to be excavated and hand led. The first clean up of gold is looked forward to with much interest.

Labour Notes.

THE Monmouthshire and South Wales Collieries Association determined on Monday to give the miners of South Wales coal fields notice of a reduction in wages of 2½ per cent. The result of the audit for the present year is that the wages payable to the workmen will be 12½ per cent. above the standard rate of December, 1879, being a reduction of 28½ per cent. after July 1 next.

AT a meeting of the joint board of the workmen of Messrs. Bolckow, Vaughan, and Co. South Durham Collieries, held on Tuesday night, it was decided that the whole of the men employed in the collieries of that firm should come out on strike on Wednesday morning in defence of the Westerton workmen, who have a dispute with their masters about bad gearings. It is estimated that about 5000 persons will be thrown out of employment.

THE dispute which had been pending at the Podmore Hall Colliery near Newcastle-under-Lyne, has been brought to a satisfactory conclusion. The men objected to sign an agreement proposed by the employer (Mr. W. Y. Craig, M.P.) dealing with the question of fraudulently sending dirt to the surface with the coal—a practice which Mr. Craig asserted some of his men persisted in. At a meeting of the employees, on Wednesday evening, it was reported that a deputation had waited upon Mr. Craig, and obtained a modification of the agreement, the terms of which were now placed before the men in the most favourable light. After a long discussion, a resolution was passed agreeing to the terms laid down by Mr. Craig—that all prices remain as they have been in all places, subject to a 10 per cent. reduction, and that the dirt agreement be signed and tried for a month—a man being employed to look after the interests of the men for that period. The men will accordingly resume work on Monday.

On Thursday, at the Bishop Auckland Police-court 2 putter boys were fined 30*s.* and 9*s.* costs each, for leaving their work at Messrs. Bolckow, Vaughan, and Co.'s Western Colliery without giving proper notice. The boys struck work because the manager refused to withdraw the notice given to five other boys, and it was contended by the complainants that if there had been other disputes they would have put them before the Miner's Union, instead of taking the matter into their own hands. The defence was that the pony gear was of an improper kind.

THE miners employed at the Hanley and Bucknall Colliery commenced work on Thursday at a reduction of 10 per cent. in their wages. A notice of the termination of contracts in order to reduce wages bo 12½ per cent. had been given by the masters, but this was objected to by the men. Thereupon the masters offered to renew the agreements at a 10 per cent. reduction, and this offer, after some little demur on the part of the men, was eventually accepted.

THE ECTON COMPANY.—A box of samples of rich copper ore from the recent discoveries at Clayton shaft has been received at the offices in London. This ore is supposed to be a continuation of the celebrated Ecton pipe, and will assay from 25 to 30 per cent. of copper. The manager reports that the bottom of Clayton shaft is now almost reached, as what is believed to be the last level was unroofed yesterday. If this proves correct, the works will very soon enter into virgin ground, and big returns of ore may be looked for. The ore now being raised from the new discovery is very rich, and requires no dressing.

Notices to Correspondents.

Letters containing Correspondence and all other Contributions should be addressed to "The Editor." Rejected matter cannot be returned. Correspondents are requested to write on one side of the paper only.

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The Editor is obliged to "Reciprocity" for his note, which he will see has had the desired effect.

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, JUNE 20, 1885.

TIN PROSPECTS.

It now seems certain that the cycle of success in tin has come—that we may now bid adieu to the comparatively long period of despondency from which this market has suffered. There certainly has been depression in general trade for some time, but we have failed to see as we regarded the demand there has been for tin how prices should have been kept down as month succeeded month, and the general stocks gradually decreased. For we know full well that, following the ordinary rule of supply and demand, prices in all commodities are expected to rise and fall as circumstances warrant. And, on this principle, we hold that tin should not have declined to any appreciable extent; if, indeed, at all during the past two years. The price is now about that quoted May 31, 1883, when stocks were more than 3000 tons in excess of what they are to-day. Then, too, if we glance at the total stocks, we find that they are but some 13,000 tons—surely no enormous quantity, with deliveries in London and Holland of 2000 tons monthly. What do we hear in respect of the tin deposits of the Straits and Australia? This, that the British companies in the Straits cannot work at a profit, cannot conduct their operations at anything approaching the meeting of costs, and that the ultimate result must be—if it has not actually occurred in some instances—the disappearance of all the money subscribed. This termination of unprofitable prosecution of such works must, as a natural sequence, lead to a material falling off in the supplies from the Straits. With the claims that are in the hands of other than British, matters are different. These, as we know, are worked principally by the Chinese; and so cheaply is the Chinaman to be obtained, that from this quarter tin must be expected to be poured into the European markets. Only too gladly would many of these Chinamen get away to their native soil, but the process followed is so ingenious that they cannot do so. The "universal provider," we have been informed by a gentleman recently returned from the Straits, generally has a "mortgage" on the Chinese labourer, who, completing a term of service, is found to be in debt, and is compelled to go on year by year all the time in debt to the supplier of articles. From Australia intelligence comes that many setts have been abandoned, and this betokens a diminished supply from that part of the world. Considering the rise which we had during the past two or three weeks we cannot at all agree with the opinion put forth by many that the advance has been too rapid, that it will not be maintained, but that it will certainly recede. In ourselves we are clearly convinced that the price now ruling will be maintained; indeed, we will go ever further, and say we believe tin will command a better price yet. Nothing can be more healthy than this metal, and the strong symptoms lead us to view that tin has not stopped in its upward movement. We pay little attention to the idea entertained by some that the recent slight block in the Suez Canal has had a great effect on the rise, but there may be a considerable amount of truth in the opinion largely held that the market has been kept down by a particular ring, and that these have now been swept aside, and rendered powerless for some time to come. Let tin stand on its undoubted merits, and there will be little reason for complaint on the part of mining adventurers. Mr. CORNELIUS BAWDEN, purser of Wheal Agar and South Frances, thus spoke at the sixteen-weekly meeting of the latter mine on Thursday—"We are told the rise is rapid. It is not so for us. I have seen it go down just as fast. I have seen it 40*l.* higher than now, and I do not see why we should not have 20*l.* back again." This expression of opinion fully bears out our own. Black tin is not sufficiently high even now to admit of nearly all Cornish mines paying, but it will made a considerable difference to many concerns. With the price 60*l.* per ton Cornish tin mining would prosper, and not only would the adventurer benefit, but this price would allow of the poorly-paid and hard-working miners receiving something like their just deserts. We venture to predict that should tin remain where it is—and we reassert that we believe it will—the surface labourers in most of the mines will benefit. And most of the meetings to be held from this date are certain to show what a difference in the credits a few pounds increase in tin mean. First, referring to South Frances meeting, on Thursday, we observe that had the price obtained on the last sale of tin—51*l.* 12s. 6d.—been realised at the commencement of the 16 weeks, there would have been an increased profit of some 700*l.*, or 7*l.* 10s. advance. Then Wheal Grenville meeting, on Tuesday, will show a very satisfactory profit. Last meeting of this mine was for 16 weeks, and the dividend was 2s. 6d. per share. This time the meeting is a 12-weekly one, and the profit is 1620*l.* 10s. This would give a dividend of 5s. per share, and permit of 120*l.* being carried forward. The average price of tin has been 48*l.* per ton. The next meeting should show a greater profit, as the average price will be probably more, and the quantity of tin—this time 127 tons 12 cwts.—is expected to be increased. East Pool meeting, next month, should give a splendidly-increased dividend, and Dolcoath also next month will show a perceptible increase in the profit. To mines like Levant, Botallack, St. Just United, West Basset, West Frances, South Condurrow, Wheal Agar, Wheal Basset, West Kitty, Pedn-an-drea, &c., the difference in financial statements will be most important. In Cornwall we are glad to say that the mining community are feeling that the "turn of the tide" has come; that the period of adversity has been doomed; and that the silver lining of the cloud is now seen. Not only does the advance in tin inspire local people with confidence in existing mines, but there is reason to believe that capital would freely enter the county in the prosecution of a number of abandoned setts that many believe would pay for resuscitation. Further reference to this subject will be found under the Metal Markets heading.

TRADE DEPRESSION AND THE GOLD SUPPLY.

This is the subject of an able article in the *Contemporary Review* for June, by Mr. ROBERT GIFFEN, in which the writer has dealt exhaustively with the question of the trade depression and its causes and the rise and fall in prices of commodities and the value of labour. He says, "There is surely something very innocent in the oft-put question, Why is trade depressed? Should not the question rather be, Why is trade ever prosperous? To keep in full employment the complicated machinery of a highly organised industrial community like that of England; to have matters so ordered that at a given time there is an excessive demand for labour and capital in all branches of industry, and hardly any individual willing to work in fact goes without employment; and to have all this accomplished by voluntary association and competition among the units of which society is composed, each pursuing his own interest, and labouring to produce what he believes other people will buy, is surely a miracle so astounding as to excite perpetual surprise that it should ever be performed." The writer of the article arrives at similar conclusions as to the causes of depression in trade as ourselves, and as often expressed by correspondents in our columns, especially by Mr. T. CORNISH, author of "Our Gold Supply; its effects on Finance, Trade, Commerce, and Industries," Mr. O'BRIEN, and others. Mr. GIFFEN says that for trade depression and low prices two causes only have been suggested. "One is the great multiplication of commodities and diminution of the cost of production due to the progress of invention, improved facilities of communication, lower freights, international telegraphy, and the like circumstances. The other is that the precious metal used for standard money—gold—has become relatively scarcer than it was, its production being diminished on the one hand, and the demand for it on the other hand increased. The former of these causes was discussed quite lately by Mr. FOWLER in an article in this (the *Contemporary Review*), and a greater weight assigned to it than the latter cause. We are disposed to give the greater weight to the latter." There is no wonder that gold is found to become more widely diffused, and consequently scarcer to individuals, when we find that among the European States, and including 34,000,000*l.* sent to the United states, that they have absorbed about 200,000,000*l.* sterling of gold in about 13 years. In other words, nearly two-thirds of the entire production of gold in our Australian colonies has gone to permanently enrich European nations who are adopting it as a standard coinage. This vast amount of hard cash, or new-created wealth from our gold mines, has filtered through the hands of British financiers, traders, manufacturers, and others, and slipped into the tight grasp of the enterprising foreign traders, merchants, and producers of articles for British requirements, whence it is not likely to return to benefit our depressed trade. Mr. GIFFEN further says: "Looking at all the facts, therefore, it appears impossible to avoid the conclusion that the recent cause of prices, so different from what it was just after the Australian and Californian gold discoveries, is the result in part of the diminished production and the increased extraordinary demands upon the supply of gold." . . . "The annual production of gold not having increased for 10 or 15 years, but having, if anything, slightly diminished, and tending still to diminish, is now even less in proportion to the whole stock in use 10 or 15 years ago. Population and wealth at the same time are increasing at even a greater rate than they did."

The importance of the more energetic development of the auriferous resources of the Australian and other colonies under the British Empire is the great desideratum for the improvement of British trade, commerce, and industries. Mr. CORNISH in his work on "Our Gold Supply," and in previous writings in our columns has strongly advocated the special value of gold, and in our issue (November 29th, 1884), writing on the "Depression in Trade," says—"There are many who ascribe the great prosperity and increased wealth during the past 30 years in England to Free Trade, and the increased introduction of steam power to the aid of commerce and industries; but while each of these causes have borne their part, the one prime factor which has not been, or is seldom, taken into consideration sufficiently is our gold supply. This great and important element to the increase of wealth, comfort, and happiness, its resources and means of development have hitherto been treated only with scant courtesy in proportion to the effect it has had on the extension of finance, trade, commerce, and industries, and those other sources and forms of wealth which constitute in the aggregate national prosperity. Depression in trade means the want of more gold, or a more lively circulation of coin

throughout the various channels of industry. Our gold supply can only be increased by and from one source—that is, by gold mining." . . . "Nearly the whole of the gold supply from the Australian colonies, amounting to about 300,000,000*l*, has during the past 30 years been poured into England, thereby increasing her national prosperity in absolute wealth of coin, extending her financial resources, and developing trade, commerce, and industries in such a way that would have been impossible without the aid of that "gold supply." We can but think that the great question of "our gold supply" must be more seriously considered by all writers on subjects bearing on trade, commerce, and industries than it has hitherto been. That special form of wealth—gold, which none of us can do long without some portion of, must be produced in accordance with the increase of population, and its increasing requirements. An article of wealth of great necessity, that can only be increased by and from one source of industry, naturally makes that industry an important one for the consideration of all serious thinkers. The industry of "gold mining" must, therefore, in the future be ranked as one of the highest importance to the welfare of nations and individuals, for, without an energetic development of the vast auriferous resources of the well-proved Australian gold fields there cannot be that necessary increase in the supply of gold for maintaining prosperity to British trade, commerce, and industries. As Mr. CORNISH in his work says:—"Gold is real wealth, and the standard by which all other wealth is measured. Its production is the creating of a new purchasing power, not only so far as its intrinsic value is concerned, but it is a wealth that, when produced, is the germ or means of producing additional wealth. It is different in its results from that of other productions or forms of wealth, as it is not consumed, worn out, or destroyed; its influence and its motion may be termed perpetual." Mr. GIFFEN'S article in the *Contemporary Review* will no doubt direct interest to this question of our gold supply, and its relation to the prosperity or depression of trade, and also to the only means by which an increase in the supply can be maintained—Gold Mining.

The Mining Market: Metals, Ores, &c.

METAL MARKET—LONDON, JUNE 19, 1885.

IRON.	£ s. d.	£ s. d.
Pig, GMB, f.o.b., Clyde	2 1 3-	—
" Scotch pig, No. 1 Gartshe.	2 8 6	
" " Coltness	2 9 6	
" " Clyde	2 6 3	
" " Govan	2 1 6	
Bars Welsh, f.o.b. Wales	4 10 0-	4 12 6
" " in London	5 0 0-	5 2 6
" Stafford., "	6 0 0-	6 2 6
" in Tyne or Tees	4 15 0-	—
" Swedish, London	9 0 0-	9 15 0
Rails, Welsh, at works	4 10 0-	4 12 6
Sheets, Staff., in London	6 10 0-	6 15 0
Plates, ship, in London	6 0 0-	7 0 0
Hoops, Staff.,	6 0 0-	6 5 0
Nail rods, Staff., in Lon.	6 0 0-	6 2 6
STEEL.		
English spring	12 0 0-	18 0 0
" cast	30 0 0-	45 0 0
Swedish, keg	12 0 0-	—
" fag. ham.	12 10 0-	—
Rails at works	4 15 0-	5 0 0
" Light, at works	5 15 0-	6 0 0
LEAD.		
English pig, common	11 5 0-	11 10 0
" " L.B.	11 7 6-	11 12 6
" " W.B.	11 10 0-	11 15 0
" sheet and bar	12 0 0-	—
" pipe	12 10 0-	—
" red	13 5 0-	13 10 0
" white	14 10 0-	18 10 0
" patent shot	13 15 0-	—
Spanish	11 5 0-	—
SPELTER.		
Silesian ordinary brands	13 5 0-	13 7 6
" special brands	13 10 0-	—
English Swansea	14 2 6-	—
Sheet zinc	16 15 0-	17 2 6

TIN.	£ s. d.	£ s. d.
English, ingot, f.o.b.	96 0 0-	—
" bars "	97 0 0-	—
" refined	98 0 0-	—
Australian	93 10 0-	—
Banca	nom.	
Straits	93 1. 0-	—
COPPER.		
Tough cake and ingot	47 10 0-	48 0 0
Best selected	48 10 0-	49 10 0
Sheets and sheathing	53 10 0-	56 0 0
Flat Bottoms	59 0 0-	—
Wallaroo	nom.	
Burra, or P.C.C.	"	
Other brands	nom. 51 0 0-	53 0 0
Chili bars, g.o.b.	49 7 6-	—
QUICKSILVER.		
Flasks, 75 lbs., war.	6 0 0-	—
PHOSPHOR BRONZE.		
Alloys II.		£93 0 0
" V.		105 0 0
" VI. and VII.		120 0 0
" XI.		96 0 0
" Duro A, Duro B		95 0 0
BRASS.		
Wire		5¾d.-5¼d.
Tubes		7 -7½
Sheets		6 -6½d.
Yel. met. sheath. & sheets		4⅝-4¾
TIN-PLATES.*		per box
Charcoal, 1st quality		0 18 0- 0 19 0
" 2nd quality		0 16 0- 0 17 0
Coke, 1st quality		0 13 9- 0 14 3
" 2nd quality		0 13 3- 0 13 9
Canada, Staff. or Gla. at Liverpool		9 0 0- 9 5 0

* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 5s. per box more than IC quoted above, and add 5s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

GENERAL REMARKS.

A fairly good tone has pervaded some of our markets, but there is only one metal that shows any further marked improvement, and that is tin; in fact, that is really the only metal in which any substantial advance can be expected. Others are weighed down by many an adverse influence, but tin benefits from the animation arising from speculation and a fair *bona fide* trade. The market for tin is lightened by small stocks and by a temporary suspension of supplies, but others are weakened, if not rom unprecedentedly heavy stocks, yet from stocks far too heavy for the present state of the market, and from an ever growing production, which leads to the anticipation of permanently reduced prices. We now draw this comparison because attention at the present time is almost exclusively directed to the activity upon the tin market, and the inactivity of other metals. The comparison is, indeed, very striking. In the one, there is animation and briskness; in the others, an unbroken idleness and undisturbed quiet. In the one, prices are advancing by leaps and bounds of 1*l*., 2*l*., 3*l*., and even 4*l*. per ton per day; in the others, there is an incessant crumbling away. In the one, holders, operators, and tin mining share proprietors are realising enormous profits; in the others, loss is added to loss, and in the one, cheerfulness pervades the whole tone, while, in the others, everything is viewed through a most gloomy medium, and, furthermore, in the one, there, is a feverish excitement and fluctuations, whilst, in the others there is a manifest neglect, and a total indifference about doing business. The advance in tin may every now and again cause firmness in other metals; but the speed with which they always lose that strength of tone is a striking indication of the total absence of confidence of any advance being permanently sustained. There has been a sort of mania to buy tin at the advancing prices, but it has been chiefly confined to the regular operators in metals, although it is possible that the encouraging prospects of that metal will even attract the outside public to purchase, and drive up prices still higher. Nevertheless, in other metals there is no inducement offered, and, therefore, the best we can anticipate is that one branch of the trade, at all events, will be active, though others will be dull. But what is it that has made tin so attractive and the others so neglected? Supplies. In the one they are short, and in the others they are excessive. In the one they are regulated in accordance with requirements, and in the others they are not. In the one suppliers are satisfied with selling a moderate quantity at a good value, and in the others they prefer to try and make up for the deficiency in values by an increased output. The contrast between tin and other metals gives a most favourable opportunity for suppliers all round to see which of the two is the better policy to pursue. If supplies are heavy and above the wants of the trade then must prices be low and *vice versa*. Supply and demand must ever regulate a market, and while speculation and other influences may be at work, at the present time supplies and demand are the main events which are influencing prices, and upon them the future also depends.

COPPER.

Owing to rumours of good deliveries for the first half the month, this market was stronger on Saturday, and up to 44*l*. 15s. was paid for cash parcels of Chili bars, but on Monday, notwithstanding the rumour of good deliveries being confirmed, the market eased off to the extent of 2s. 6d., at which it remained very steady until yesterday, in spite of the heavy charters which were advised from Chili on Tuesday as 2400 tons for the first half of June. The shipments were announced as 1400 tons, the exchange slightly better at 26, and the price in Valparaiso was telegraphed as 44*l*. cost and freight to Liverpool. Although 44*l*. 12s. 6d. was the general price, 44*l*. 15s. was paid; but yesterday buyers were again very scarce, and 44*l*. 10s. was accepted, whilst to-day the market was steady thereat until the close, when 44*l*. 7s. 6d. was taken. The receding tendency of prices is but another evidence of the want of confidence in the continued stability of prices. No one, apparently, believes in the permanency of any advance, and holders are very eager to rid themselves of their stocks, and can we wonder at it when the returns show that the supplies of Spanish copper have increased during the last five years by some 11,000 tons, Australian by about 4000 tons, and American by over 40,000 tons, and that there is nothing like a proportionate increase in the requirements of the trade. It is true that deliveries during that time have largely increased, arising no doubt, principally from the low price, but it is evident that present cheap values do not check supplies, for during the last 12 months supplies have been nearly 14,000 tons in excess of what they were for the previous 12 months, though the average price for the same periods has been 10*l*. per ton lower.

IRON.

Undisturbed quietude continues to reign throughout the whole of this trade, and there is no new feature to record in any branch. If a little more enquiry exists here and there for certain descriptions of iron in some parts of the country there is less doing in others, and the actual turnover seems rather to diminish than otherwise. Notwithstanding the easy tendency of prices orders are difficult to secure, and for severe depression the trade has barely any parallel. Every week our returns from Glasgow of the Scotch trade, and also from Cleveland of the North of England trade are more and more unfavourable. There is constant and repeated depreciation in prices, and there is an ever swelling of stocks which weighs down prices, and makes the tone of the market gloomy in the extreme. The Scotch shipments are also very light, and the falling off from year to year is a matter of serious moment as it strongly indicates a declension of trade. The following figures showing the shipments up to the end of last week for this year, and to the corresponding period of the few previous years are very striking.

Shipments to middle of June,			1880,	were	360,240 tons.
"	"	"	1881	"	252,212 "
"	"	"	1882	"	289,555 "
"	"	"	1883	"	287,126 "
"	"	"	1884	"	260,458 "
"	"	"	1885	"	212,711 "

Such repeated reductions is a most unfavourable sign, and it proves that the outlet for iron is not so large as it was—a fact which is also further proved by the increasing stocks. With one exception the public stock in Glasgow is now considerably heavier than it was at the same time of any of the above enumerated years, and since it is gradually swelling every week, it is not surprising that the market should drag, and repeated concessions be made in price. The demand for makers' iron is still inanimate, and prices are again somewhat easier. The Glasgow Warrant opened on Monday with some pressure to sell, and business in warrants was transacted down to 40s. 9d.; but the low price attracted buyers, and on Tuesday the market rallied from 40s. 10½d. to 41s., a fair business being carried through. On Wednesday there was a moderate number of transactions carried through at 41s. 0½d., sellers being over at 41s. 1d.; and yesterday the price was firm at 41s. 2½d.; while to-day, after opening at 41s. 2½d., the market closes for the week at 41s. 3d. The shipments last week were again small, being only 9916 tons, against 11,151 tons for the same week of last year, or a decrease of 1235 tons, and which makes the total shipments for the whole of this year, as above stated, 212,711 tons. There is one furnace less in blast, the present total being 91; but the public stock has again been further increased by 976 tons, and amounts to 599,042 tons, against 598,066 tons last week. The imports of Middlesborough pig-iron into Grangemouth last week were 6780 tons, against 4170 tons for the same week of last year, being an increase of 2610 tons, and which makes a total increase for the whole of this year, compared with last, of 57,052 tons. The Middlesborough market continues void of all animation, and further reduced prices have again been accepted—in fact, there seems to be no bottom whatever to the market, whilst the prospect is still considered most gloomy. For prompt delivery No. 3 is offering at 32s. 3d., and for forward 32s. 6d., the price for No. 4 forge-iron being 32s. 3d. In the public stock there is a further increase of 500 tons, and the total stock now amounts to 51,232 tons. Shipments are still very limited, those for the first half of the month having been only about 40,000 tons. In manufactured there is very little doing, and prices tend in favour of buyers. Bars are quoted at 4*l*. 17s. 6d.; angles at 4*l*. 10s. to 4*l*. 12s. 6d.; ship-plates at 4*l*. 15s. to 4*l*. 17s. 6d., and puddled bars at 60s. per ton. Advices from Wolverhampton show that there is not much business doing, and best plating bars are quoted at 6*l*. 10s.; blooms at 5*l*. 10s., and billets at 5*l*. 5s. These prices compare with 5*l*. 15s., 5*l*., and 4*l*. 10s. respectively for Welsh qualities. Galvanised iron has been reduced 10s., the present quotation for 24-gauge being 12*l*. 5s., and pigs show no improvement, the price being 40s. for Derbyshire, and 35s. for common Staffordshire. A moderate business has been done at Birmingham, principally for sharp delivery, but there is no improvement in prices. Manufacturers do not seem to care to sell forward in any quantity at current rates, and stocks generally are large, particularly those for pig-iron.

TIN.

This market has been rather irregular, nevertheless prices have, for the most part, shown an improvement, the chief business having been transacted at further advanced prices. On Saturday the market was very active, and the price improved from 93*l*. 10s.—the closing figure of last Friday—to 95*l*., cash, and on Monday morning business was done up to 97*l*. 10s.; but later on in the day, owing, perhaps, to the announcement of light deliveries for the first half of the month the price receded to 95*l*. 5s., and after 'Change had broken up, there were sellers at 94*l*. 15s., and no buyers above 94*l*. 10s. On Tuesday the market further fell away to 94*l*.; but, on Wednesday, there was another rebound to 95*l*., and yesterday the market remained strong thereat, whilst to-day it has been most fluctuating—first declining to 92*l*. 5s.; afterwards rallying to 93*l*. 17s. 6d.; then back again to 93*l*. 5s.; and finally closing at 93*l*. 10s. In such a changeable market it is rather difficult to predict the future, and we can only point out certain facts, which it is only reasonable to anticipate will have their bearing upon the market. In the first place, there is still the temporary check to supplies. The Suez Canal remains blocked, and seems likely to be so for some few days longer, whilst advices show that there are more than 100 steamers detained there. During this time deliveries are going on, it may not be largely, but nevertheless regularly, and the light stocks here are, therefore, being daily reduced, and for the time being cannot be replenished. Most of the tin here is held by strong holders, and, therefore, from these reasons temporary strength, at least, is given to the strong, and increased power is given to the mighty. It may not altogether suit operators to let the market run away too speedily, and hence the little damper which is every now and again placed upon the advancing prices, but the experience of the past few weeks testifies to the fact that such a check is immediately followed by a further sharp advance. Whilst the market here is excited, animate and advancing advices from America show that the improvement is not confined to this country. Telegrams from America state that over 102*l*. per ton has been paid there for Straits tin. We have not yet reached that figure, but it is one which is by no means improbable with the temporary cessation of supplies, the immense falling off in stocks of late years, and the strong disposition that exists by the "bull" party to push up prices beyond their present level.

SPELTER.—The market has been quiet, and ordinaries are now offering at 13*l*. 5s. to 13*l*. 7s. 6d., and specials at 13*l*. 10s. per ton.

LEAD is firm, and there are buyers at 11*l*. 2s. 6d. for Spanish, and sellers are asking 11*l*. 5s. per ton.

STEEL.—There is a fair business doing at Birmingham in this metal, but in the North steel rails are very dull of sale, and 4*l*. 15s. is the quoted price, whilst for shipbuilding purposes the demand is particularly quiet.

TIN-PLATES.—There is very little doing in tin-plates, and manufacturers are by no means eager sellers in face of the reduced prices and the increased value of tin.

QUICKSILVER.—A quiet market; secondhand parcels are on offer at 5*l*. 17s. 6d., whilst the importers are firm at 6*l*.

A fairly active business has been transacted on the MINING SHARE MARKET this week, but, for the most part, it has been confined to low-priced mines that show a disposition to rise, rather than to dividend properties, which seem to fluctuate with that most uncertain thing—the standard for tin ore. Thus it will be found that while a few promising progressive mines have had a good rise in prices, Dolcoaths and other heavy shares have been weaker in price, and more neglected by the public. Those mostly dealt in have been Devon Great Consols, East Blue Hills, Killifreth, Prince of Wales, Metal and Flow, Blue Hills, Wheal Grenville, New West Caradon, West Kitty, D'Eresby, and a few others.

TIN has reached 97*l*. this week, and after a few rather sudden fluctuations up and down, leaves off about 95*l*. On Monday the smelters put up the standard for ore 4*l*., but dividend tin mines remain flat, and very little business has been done in them. In a few young mines a large business has been done, the activity displayed in them bringing in many fresh buyers to the market, which shows a marked improvement from the depression that so long hung over it. Blue Hills are quoted ⅔ to 1; Carn Brea, 3½ to 4; Cook's Kitchen, 8⅔ to 9¼; Dolcoath quiet, at 69 to 71; East Pool, 44 to 45; Killifreth, ⅝ to 1; New Kitty, ¾ to 1; South Condurrow, 7½ to 7¾; South Crofty, 3½ to 4; South Frances, 9 to 9½; Tincroft, 7 to 7½; West Basset, 2½ to 3. West Frances remain weak at 7⅞ to 8¼. West Kitty, 7 to 7⅛; Wheal Agar, 18 to 19; Wheal Basset, 9 to 9½; Wheal Kitty (St. Agnes), 10s. to 15s.; Wheal Peevor, 10s. to 15s.

East Blue Hills have been largely dealt in, and leave off 36s. to 40s., buyers. The general opinion now seems to be that the mine is now opening out into a valuable property. The ends are now worth respectively 20*l*. and 35*l*. per cubic fathom—that is, 40*l*. and 70*l*. respectively for the width of the lode (12 ft.) Wheal Grenville, 10¼ to 10⅜; at the meeting on Tuesday the accounts will show a profit on four months' working of about 1600*l*., equal to a dividend of 5s. Wheal Metal and Flow, ⅛ to 1; Goodevere, 1 to 1¼; Mounts Bay, 2s. 6d. to 3s. 6d.; West Godolphin, 1 to 1¼.

COPPER has kept about the same. At the Cornish Ticketing on Thursday the standard for ore in Cornwall advanced 5s. The average price of the ore sold was 2*l*. 2s. 6d.; average produce, 5¾; standard, 84*l*. 15s.: There has been rather more business doing in shares. Bedford United are quoted ½ to 1; the sale of ore, 122 tons, realised 305*l*. Devon Great Consols have advanced to 3½, 3¾; the sale of ore realised 1056*l*. Gunnislake (Clitters), 5s. to 7s. 6d. New West Caradons have advanced to 3s., 4s.; this mine is looking better, and the lode lately cut worth 1½ ton of ore per fathom. Mellanear, 1 to 1¼; Prince of Wales have been largely dealt in at 8s. to 10s. The mine continues to look well.

West Seton, 5¼ to 5¾. Wheal Crebor, 1 to 1¼; the sale of the ore here—500 tons—realised 1280*l*. 6s., or less money than was anticipated. It is understood, however, that the accounts for the four months will show a profit notwithstanding the price of ore, the mine being worked by water-power. New Cook's Kitchen, ⅜ to ½; South Caradon, ¼ to ⅜. Russell United, 5s. to 5s 6d.; at the special meeting it was resolved to increase the capital of the company by the issue of 14,000 new shares of 1*l*. each, and that such shares be issued at a discount of 15s. each. The 2700 forfeited shares are also to be re-issued at 5s. each.

LEAD is advancing and likely to rise, thus more attention is being paid to lead mines that have been for a long time depressed and neglected. Vans are quoted ⅛ to 1⅛; the lode in the 135 is worth 2½ tons of lead ore per fathom; and, in addition to the 100 tons of lead, there are 100 tons of blende for sale. The agent's report this week, which will be found in another column, is one of a very encouraging character, and will be read with much interest by the shareholders.

Leadhills, 1½ to 1⅝; Roman Gravels, 3¼ to 3⅜; Great Laxey, 8 to 8½; D'Eresby, 1 to 1¼, fully paid; the agent's report this week shows a marked improvement, and would seem to indicate that the shale is wearing out, and lead coming in under, as it did in the great deposit in Van. Craven United, ⅜ to ½; East Wheal Rose, 3s. to 5s.; Old Shepherds, 4s. 6d. to 5s. 6d.; Standard Lead, 1¼ to 1⅜; Weardale, 1 to 1⅛; South Darren, 4s. to 6s.; good progress is being made with the shaft. No change in the mine.

FOREIGN MINES are very quiet, and quotations are mostly nominal. Bratsberg, ¾ to 1; the various points in operation (deducting the value of those temporarily suspended for putting skip-road in York's shaft) are valued in the aggregate at 330*l*. per fathom. The first of the season's deliveries has just weighed out at Newcastle, 220 tons net copper ore. A second cargo has been sold at 8s. per unit. Birdseye Creek, 1⅛ to 1⅜; a telegram has been received—"Will complete clean up on July 1st. Hand you a remmittance of $2000." Callao Bis, 10s. to 12s. 6d.; Cape Copper, 29 to 31.

Oscar, 10s. to 12s. 6d.; very satisfactory reports from the manager and reduction officers have been received. Daw's lode has cut rich stuff, and Oscar lode improving. Chile Gold, 4s. to 5s.; Colorado, 1⅛ to 1⅛; Columbian Gold, 10s. to 12s.; Copiapo, 2⅛ to 2⅜; Frontino and Bolivia, 7s. 6d. to 10s.; Hoover Hill, 5s. to 6s.; La Plata, 5s. to 6s.; Lisbon Berlyn, 1s. 3s. to 1s. 9d.; Mysore, 1⅛ to 1⅜; Nundydroog, 8s. to 9s.; Organos, 6s. 3d. to 8s. 9d.; Orita, ⅛ to 1⅛; St. John del Rey 67½ to 72½; Panulcillo, 2⅛ to 2⅛; Richmond, 2⅞ to 3⅛; Santa Barbara, 1 to 1⅛; Schwab's Gully, 3 to 3⅛; United Mexican, 2¾ to 3; Eberhardt and Aurora, 3s. 6d. to 4s. 6d.; Potosi, 4s. to 5s Ruby, ¾; New Emma, ⅜ to ½; Montana, 1⅜ to 1½.

BLENDE

Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 19	Great Holway	40	£ 3 2 0	Vivian and Sons.
—	ditto	10	1 17 0	ditto

Mining Notes.

THERE is reason to believe that the very important increase in the price of tin which has taken place during the past few weeks will mean the resuscitation, almost immediately, of at least one important mine in Cornwall. Such a feature is eminently pleasing. We hear that the representative of the lord on whose property is the Great North Down sett, has received a letter from a well-known firm connected with mining enquiring on what terms a lease can be given. Two years ago we heard a report to this effect, but if the gentlemen now moving are those who then were announced as applying, or intending to apply for the sett, we must assume that they have been awaiting better times, which seemingly have now come. This mine can be worked for copper and tin, and has, when in work, returned great profits.

WHEAL Grenville meeting is on Tuesday next in London, and our forecast of what would be done has been amply justified. A profit will be shown double that of last time. A 5s. dividend is possible, but it is thought by some people locally that the committee may recommend an addition to the reserve fund in order to provide for the future development of the East Grenville portion of the sett, which part is the most promising in connection with the mine. East Grenville would not have been shut up by the old shareholders had they fancied there was the treasure there is underground, as has been so far proved.

SOUTH Frances account, which we report in another column, was eminently satisfactory. Last time a loss was shown of several thousand pounds, and a call of 4500*l.* was made. Then the water was in, and the machinery was being put in thorough order; efforts were being made to put in "permanent improvements." These last sixteen weeks a profit has been made of 450*l.*, but to this should be really added 750*l.* spent in "dead work"—in other words in prosecuting a new mine. And this portion of the mine is expected to turn out "trumps." It was mentioned at the meeting that a gentleman had offered 23,000*l.* for the western part, but the idea was scouted. Years since 30,000*l.* were offered for this part of the concern. South Frances is soon to come to the front—at least, that is the general belief.

AS was anticipated the new lode recently cut in the 38 fathom level at New West Caradon Mine has improved during the past week, and is now more than 2 ft. wide, worth fully 1½ ton of good yellow copper ore per fathom, and showing favourable features for further improvement as it gets away from the influence of the cross-course. The lode is also now being opened upon westward, but being still in the cross-course in that direction it will take a few days to ascertain its character and value. Should it prove to be Jope's lode it must, after leaving West Caradon Mine, have taken a line considerably to the north of west, as from the dialling it was not expected to be intersected under 14 fms. further driving. It has, however, always been supposed that under the former, working of West Caradon Jope's lode was either missed or lost in the western ground, and it may be that the present discovery will clear up this, and if the supposition should prove to be correct the new lode may prove of great importance to West Caradon as well as New West Caradon.

TOLGULLOW United Mines are opening out far in excess of the most sanguine anticipations entertained by the promoters, and the returns are already exceeding the monthly cost, whilst good reserves are being left in every point of operation; upwards of 10 tons of black tin were sold on Monday last for four weeks working, and a larger quantity is promised for the next sale for the same period.

THE Violeta Gold Placer (Limited) have received a telegram from the company's manager in Spain announcing that sluicing for gold was commenced at the Violeta Gold Placer on Wednesday morning.

THE Ouro Preto Gold Mines of Brazil (Limited) have received a remittance of gold, value 1686*l.*

THE New Albion Gold Mining Company have received the following telegram from their manager, dated Halifax, June 16: "Crushed 160 tons quartz; yield, 400 ozs. gold."

A PETITION has been filed for the liquidation of Crooke's Mining and Smelting Company.

IT is to be hoped that the silver lining of the dark cloud which has so long hung over the mining industry of Shropshire is beginning to show forth. A certain firm smelting nothing but Shropshire ores have, we learn, sold their best pig-lead at 14*l.* per ton, and refused 11*l.* 10s. for their second quality. If these prices can only be maintained we shall soon see brighter days. The Cliffdale Barytes Company have commenced operations on Middletown Hill, and are now raising superior sulphate of barytes in large quantities. Mr. Boustred, the managing partner, has decided to make trials for lead and china stone which are known to exist in large quantities upon the sett.

THE Hingston Down Mine, with its machinery and materials, will be offered for sale at the Queen's Head Hotel, Tavistock, on Friday next, as a going concern, in one lot. The lease is for 21 years from January, 1882, subject to a royalty of 1-20th on all ores and an annual dead rent of 50*l.*

THE Richmond Consolidated Mining Company (Limited) have received the following cablegram from the mine at Eureka, Nevada:—"Week's run (one furnace), $18,000 from 292 tons of ore. Refinery, $15,000."

THE directors of the Ooregum Gold Mining Company of India (Limited) have made allotment on the new issue of preference shares, applications having been received for considerably more than the minimum number of 100,000 shares.

MR. JOHN HOCKIN, the Chairman of the St. John del Rey Mining Company, had a more pleasing task in commenting on the report at the meeting on Wednesday than has been his lot for some few meetings past. During the past year the mine has made a monthly profit instead of a monthly loss, and it must have gratified the shareholders present to learn that the profits for the first two months of the previous year have been 1000*l.* a month more than the average profit of the past year. The average yield of gold per ton was ½ oit. more than last year. The last few months have shown an increasing improvement in the re-treatment of the gold. A reduction has been made in the costs of 6232*l.* Altogether the meeting was the most encouraging which the shareholders have attended for some time past.

A GENERAL meeting of the shareholders of the Hartington Moor Lead Mining Company (Limited) will be held at the office of Mr. Alfred Ludlam, in Youlgrave, near Bakewell, Derbyshire, on July 21 next, at one o'clock in the afternoon, for the purpose of having an account laid before them by the liquidator showing the manner in which the winding-up of the company has been conducted.

THE liquidators of the Kapanga Gold Mining Company, New Zealand (Limited) (in liquidation), have sent a circular to the shareholders, informing them that the response to the subscription of 6d. per share, suggested by their circular of 25th February, having proved inadequate, they have decided to return the amounts forthwith. On presentation of their receipts at 95, Dashwood House, New Broad-street, those shareholders who subscribed can receive a cheque in exchange.

IT was stated at the meeting of Wynaad Perseverance Estate and Gold Mining Company, on Thursday, that mining operations on this property have been almost abandoned. The machinery is being kept in order in case it should be deemed desirable to re-open the workings at a future date. The agricultural operations are being carried on with more or less success; but it seems questionable whether they will ever yield a substantial profit to the shareholders.

RESOLUTIONS have been passed to wind-up voluntarily the Hultafall Mining Company (Limited) with Mr. W. J. Lavington as liquidator.

THE resolutions passed at a recent meeting of Russell United, authorising an increase of the capital of the company, were unanimously confirmed at the second meeting held this week. There is every indication that something good will be met with in this mine shortly. About 50 fms. from the entrance to the adit stoping has commenced, and there the lode is 11 ft. wide, producing good tinwork throughout, with a very fine-looking lode. Busy preparations are being made on the surface for the stamps, laying down dressing-floors, and doing other necessary work. The 12 heads of stamps are on the mine, and it is expected they will be erected and be in good working order in three weeks. By the time the stamps are completed there will be 300 tons of stuff ready to dress. Mr. Thomas Stephens (the Chairman) and his co-directors, seem to take as much interest in their work, and to pay as much attention to it, as if the mine were their own, and they are evidently bent upon making it a success, if success be possible. That it is possible there is every reason to hope and believe.

THE capital of the New Potosi Company (Limited) is to be increased by 200,000 shares, which will be offered to the shareholders at 15s. per share discount, 1s. per share payable on application, and the balance by calls of 1s. per share. It is satisfactory to know that this undoubtedly valuable property will be vigorously worked, and, judging by all the reports which come to hand, with every prospect of success.

THE report and accounts submitted to the shareholders of the Ruby and Dunderberg meeting, on Tuesday, were adopted. The reconstruction of the company seems to have been carried out most successfully, and a larger number of shares was applied for than the directors had to allot. The full report of the proceedings, which we give in another column, renders further comment unnecessary. Suffice it to say that the prospects of the mine are most promising.

WE regret to announce the death of Mr. Thomas Rickard, a native of Perranporth, in Cornwall, at the age of 49, which took place at 19, St. Aubyn's-road, Upper Norwood, on the 13th inst. The deceased was for 17 years the successful manager of the Var Mines, near Nice, and for the last few years manager of the Antimony Mines of Massiac, in France.

ROMAN Gravels continues to open out well, and an important feature is reported by the manager this week in the discovery of a separate and important division of lodes from the big lode at the 95 south, which looks like the middle course driven upon in the 65, where there was a rich course of lead ore for a considerable distance, and the south or shale bunch must be standing beyond the 110, 95, and 80 ends. The manager states this week that everything seems very convincing on this important point, which, of course, will add very considerably to the value of the property. The half-monthly sampling of 100 tons of lead ore has been made this week, and 70 tons of blende, which are expected to bring improved prices.

LEAD Hills Mining and Smelting Company's shares (6*l.* fully paid) have been in demand, at 1⅝ to 2. The improving price of lead, and the enhanced value of the different points of operation on the several lodes, which are worth together about 38 to 40 tons of lead ore per fathom, have caused an increased demand for these shares. Jeffrey's shaft is being pushed on vigorously, in and around which a rich course of lead ore is shortly expected, as well as in the 85, north of this shaft, in both of which places the lode has increased in size to an average of about 6 ft., with a most promising appearance for an early and important discovery of ore.

AS will be seen by the report in another column, the Bratsberg Mines continue to open out most satisfactorily. The various points in operation, even at the present low price of copper, are valued in the aggregate at 330*l.* per fathom, excluding several productive places which are temporarily suspended during the construction of the skip-road to the bottom of York's shaft. The greater part of the ore stocked at Bandagslie Lake during the winter has been forwarded to the shipping port of Skein. The first cargo of this ore per the Mary Owens has arrived at Newcastle, and weighed out 220 tons net. A second cargo has been sold in South Wales at 8s. 3d. per unit, and regular shipments will now follow in rapid succession during the summer and autumn.

DEVON Great Consols have advanced to 3¼, 4. The monthly sale of copper ore on Thursday last was 1058*l.* 2s. 6d. The lode in Wheal Maria, in the 12 fm. level, east and west of the eastern shaft, is of a promising character, yielding copper and arsenical ores, as is also the 112 and the 124, at Watson's part of the mine, whilst in the 220 west, at Wheal Emma, on the south part, the lode, which is 4 ft. wide, is of a strong, masterly character, producing copper, tin, and arsenical ores.

AT Drakewalls a sale of 8 tons 14 cwts. has been made this week at 52*l.* 10s. per ton, realising 457*l.* 2s. 6d. This price shows an advance of 10*l.* per ton on the sale made last month. The engine-shaft has been sunk during the past month 7½ ft., and the lode therein maintains its value of 10*l.* to 12*l.* per fathom. The north lode, as reported by the manager, continues to open out well.

A largely attended meeting of shareholders in Cartago was held on Wednesday, under the presidency of Mr. Joseph Nelson, by whom the meeting was convened, and a committee was appointed to investigate into the formation and subsequent history of the company. The only general meeting of the company held since its formation, in January, 1884, was the statutory meeting held in May, 1884, so that the shareholders were really in the dark as to what progress was being made with the development of the property. The statements made by the Chairman on Wednesday were in direct contradiction to some of the clauses in the prospectus, notably as to the size of the estate. The prospectus stated that the Cartago property was five times as large as El Callao, whereas the Ordnance map seems to show it to be only 1-50th part of the area of El Callao, and whilst the sketch map indicates the existence of the Callao lode in Cartago, Mr. Nelson affirmed that the lode does not run nearer to the property than a distance of 4 miles.

THE lower levels in Colorado United are now being driven by power drills, and considerable progress is being made. The 9th, 10th, 11th levels west, and 13th and 14th levels east from shaft all in ore.

THE directors of the Copiapo Mining Company have declared a dividend of 1s. per share for the current quarter.

ALTHOUGH the Central Committee of the Mining Division of Cornwall have, by a majority of 59, in a meeting numbering nearly 500 persons, chosen Mr. A. Pendarves Vivian, M.P. for recommendation to the constituency as the candidate in the Liberal interest, it must not be accepted as conclusive that Mr. Vivian will be the first Member for this Division. Without in any way assuming a political position on one side or the other ourselves, we cannot but say that in our firm opinion a Conservative representation of the Division is impossible. The constituency is in fact about as Radical as any in the country, not excepting Radical Birmingham or Glasgow, and should a Conservative have the courage to come forward presuming there be a split—which is extremely likely from present appearances—he would probably find the numbers recorded for him literally infinitesimal in comparison with the votes that would be given in the Liberal interest. We last week observed that, after due deliberation and observation we had come to the conclusion that Mr. Conybeare would prove the better candidate for the Mining Division. There is no denying the assertion that the Committee of Selection—this Central Committee supposed to consist of delegates—was not properly appointed. The constituency, as a constituency, was not considered as it should have been in the nomination of delegates. In some instances the most influential of Liberals immediately outside the towns were desired to "name" those who should have the recommendation, for particular places of the candidate, and in one case, at Troon, a meeting of the inhabitants was held on Friday, the 12th inst., and unanimously declared they would not be bound by the decision of the delegates' committee, they (the inhabitants) not having been consulted in the matter. It says a great deal for Mr. Conybeare's chance that in a body of delegates supposed generally to have inclinations in favour of Mr. Vivian, by reason of the manner in which these delegates obtained their position, Mr. Conybeare received no fewer than 191 votes, as compared with 250 for the sitting member.

SPECULATORS in London should not lose the opportunity of acquiring an interest in Wheal Uny, which the Messrs. Watson will place upon the market. The important rise in tin has taken place since the old company, through relinquishments, were compelled to stop operations, and begin afresh with a new company. We have not yet seen the prospectus, but know that the principal local shareholders were determined, if they had assistance, to see that which they have been for so long endeavouring to reach. Even outsiders who known nothing of mining in itself, and who are desirous of "going in" for a good speculation, may place confidence in the expressed opinion of the most experienced mine agent in Cornwall, Captain Josiah Thomas.

CORNISH smelters put up the standards 4*l.* on Monday last, but there was the usual tardiness in moving upwards.

IT is said that the 200, east of cross-course, in Carn Brea, is rapidly improving. Not the next, but the succeeding account is predicted to prove eminently satisfactory.

NOW that tin has improved so well, that a lode has been cut, and the mine is paying costs, West Seton shares should have an improvement. They are cheap, and have been at a high figure.

KILLIFRETH is making a satisfactory profit, and the manager's opinion is thus being borne out.

MESSRS. John Elder and Co., Govan, Glasgow, have contracted to build three steamers, each 5500 tons, for the North German Lloyds. The work will be immediately commenced, and there will be a resumption of activity, which is greatly needed, several thousand men in the district being idle.

OWING to the death of Mr. Young, Governor-in-Chief of the Gold Coast Colony, Mr. Frederick Evans, C.M.G., has been ordered from Accra to Lagos, for the purpose of administering the Government, the Lieutenant-Governor, Mr. Brandford Griffith, C.M.G., having gone to Accra to assume the post of Governor.

THE name of Mr. William Pickard, miners' agent, is included in a list of new magistrates just appointed for the borough of Wigan. Mr. Pickard is the first representative of the miners appointed to the magisterial bench. "A Colliery Agent" writes to the *Times*:—The appointment of Mr. William Pickard, miners' agent, as a magistrate for the borough of Wigan is announced. The Coal Mines Regulation Act, 1872, s. 67, provides that "a person who is the owner, agent, or manager of any mine to which this Act applies, or the father, son, or brother of such owner, agent, or manager, shall not act as a Court or member of a Court of summary jurisdiction in respect of any offence under this Act." This section does not include an agent of a miners' union, but who, being a paid officer of the union, would have as great a bias on behalf of workmen as an owner, agent, or manager of a colliery, or their near relatives, could possibly have on behalf of masters. It seems necessary to alter the law so as to prevent miners' agents appointed magistrates sitting on cases arising out of the Act, in the same way that owners, &c., are now prohibited doing so.

GOLD AND SILVER.—Messrs. PIXLEY and ABELL write under date June 18:—The amount received since our last by the Bank of England is 404,000*l.*, and on the other hand, 214,000*l.* has been withdrawn. Of this, 32,000*l.* has gone to Germany, and 50,000*l.* to South America. The Indus, from Australia, brought 25,000*l.*; the Garonne, from Melbourne, 65,000*l.*; the La Plata, from Brazil, 26,000*l.*; the Magellan, from Chile, 10,000*l.*; total, 351,000*l.* Silver: The silver market has been seriously hampered during the past week by the breakage in the Eastern Telegraph Company's system, and we quote this day 49⅛*d.* per oz. standard. Owing to a special order for the Continent having been received, the price has been maintained, the Indian banks being unwilling to operate above 49¼*d.*, and only to a limited amount at that rate. The banks of Bengal and Bombay have reduced their rate of interest and discount to 5 per cent. The arrivals have been, from New York, 66,000*l.*; from Chile, 53,000*l.*; and the shipments, to India, per Siam, 64,500*l.*; per Pekin, 27,000*l.* Mexican Dollars have been sold during this week at 48⅛*d.* on French account, and the chief arrivals have been:—From New York, 520*l.*; from Vera Cruz, 196,000*l.*. The P. and O. steamer Pekin takes 62,878*l.* to China and the Straits. Exchange: Another small allotment was made at the Bank of England yesterday, the amounts being:—Bills on Calcutta, Rs. 3,30,000, average rate, 1s. 8·307d.; bills on Bombay, Rs. 6,58,000, average rate, 1s 8·324d. Tenders for bills at 1s. 6 29-32d. receive 32 per cent. and above in full. 10 Lakhs are again offered this week. The last wire rate from Bombay and Calcutta is 1s. 6 27-32d., and for four month's Bank bills from Hongkong, 2s. 6⅛*d.*, and from Shanghai, 4s. 10⅛*d.* Quotations for Bullion: Gold: Bar gold, fine, 77s. 9*d.* per oz. standard; bar gold, containing 20 dwts. silver, 77s. 10⅛*d.* per oz. standard.—Silver: Bar silver, fine, 49 3/16*d.* per oz. standard; bar silver, containing 5 grs. gold, 49 5/16*d.* per oz. standard; cake silver, 53 1/16*d.* per oz.; Mexican dollars 48 1/16*d.* per oz. nominal; quicksilver, 6*l.*; discount 3 per cent.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr WM. ABBOTT, of Tokenhouse-yard, are given in tabular form in the Stock and sha List page of the Journal.

STOCK AND SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.		Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
12000	Bedford Unit.,* c, Tavis. (£1 liab.)	0 14 0	1	¾ 1	0 1 0	0 2 0	Nov. 1884
6000	Carn Brea, c, t, Illogan†§	14 15 5	4	3¾ 4	52 11 8	0 10 0	Nov. 1881
4000	Craignant Bach,* l, Cardigan	5 0 0	—		0 5 0	0 5 0	Nov. 1882
10240	Devon Gt. Consols, c, a, Tavistock*†	1 0 0	2⅞	3¼ 3¾	118 7 0	0 6 9	Dec. 1880
4700	Dolcoath, c, t, Camborne	10 14 10	71	69 71	42 14 0	1 1 0	Apr. 1885
6400	East Pool, t, c, Illogan	0 9 9	45	44 45	43 2 6	1 0 0	Apr. 1885
12000	Great Holway,* l, Flintshire	5 0 0	⅜	⅛ ⅜	0 12 0	0 7 6	Sept. 1883
15000	Great Laxey, l, Isle of Man*†	4 0 0	8½	8 8½	30 13 0	0 5 0	Apr. 1885
6400	Green Hurth, l, Durham*	0 6 0	3½	3¼ 3½	5 1 0	0 5 0	Dec. 1884
9830	Gunnislake (Clitters), t, c	2 2 0	⅜	¼ ⅜	0 19 9	0 2 0	Mar. 1882
2800	Isle of Man, l, Isle of Man*	5 0 0	—		83 7 0	0 2 0	May 1885
6000	Killifreth, t, Chacewater§	4 13 6	1½	⅞ 1	0 14 6	0 2 0	Nov. 1883
20000	Leadhills,* l, Lanarkshire	6 0 0	1¾	1⅛ 1¾	1 7 0	0 1 6	Oct. 1884
2500	Levant, c, t, St. Just	11 5 0	—		0 2 6	0 2 6	May 1885
400	Lisburne,* l, Cardiganshire	18 15 0	—		615 0 0	0 10 0	June 1883
10000	Mellanear, c, Hayle*	2 0 0	1¼	1 1¼	2 4 9	0 0 6	Apr. 1885
9000	Minera Mining Co., l, Wrexham*	5 0 0	7	6 7	69 14 2	0 2 6	Aug. 1884
20000	Mining Co. of Ireland, cl, c, l*	7 0 0	1⅛	1 1⅛	24 0 0	0 2 6	Jan. 1880
1829	North Hendre, l, Wales	2 10 0	—		3 18 0	0 4 0	Nov. 1882
8146	Ditto	1 7 6	—		0 11 3	0 2 0	Nov. 1882
12000	Phœnix United, t, c, Linkinhorne§	6 6 6	1⅛	1¼ 1⅛	17 7 6	0 1 6	Apr. 1883
12000	Roman Gravels, l, Salop*	7 10 0	4	3¾ 3¾	9 13 6	0 2 6	Oct. 1884
6123	South Condurrow, t, c, Camborne†	7 5 7	7¾	7¾ 7¾	11 16 6	0 5 0	Apr. 1885
9000	South Darren, l, Cardigan*	1 10 0	6s.	4s. 6s.	0 4 0	0 2 0	Apr. 1880
6000	Tincroft, c, t, Pool, Illogan†§	14 12 6	7½	7 7½	51 3 6	0 5 0	Dec. 1881
6000	West Basset, c, Illogan†§	8 0 10	3	2½ 3	28 3 8	0 6 8	Apr. 1882
6000	West Kitty, t, St. Agnes	0 12 0	7½	7 7½	3 18 0	0 9 0	May 1885
6000	Wheal Agar, t, Illogan	19 6 0	19	18 19	1 18 0	0 5 0	May 1885
12000	Wheal Crebor, c, Tavistock	2 4 0	1¼	1 1¼	1 1 9	0 2 0	May 1885
1024	Wheal Eliza Consols, t, St. Austell	18 0 0	—		59 10 0	0 10 0	Aug. 1884
6000	Wheal Grenville, t, Camborne	15 0 0	10¾	10¼ 10¾	2 7 6	0 2 6	Mar. 1885
4295	Wheal Kitty, t, St. Agnes§	5 12 0	15s.	10s. 15s.	12 18 6	0 1 6	Jan. 1881
3000	Wheal Peevor, t, Redruth§	16 0	15s.	10s. 15s.	8 13 6	0 4 0	Mar. 1881

FOREIGN DIVIDEND MINES.

Shares.		Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35000	Alamillos, l, Spain*†	2 0 0	1½	1¼ 1½	2 17 11	0 1 3	Mar. 1885
130000	Almada and Tirito Consol., s*†	1 0 0	3/6	2/6 3/6	0 6 3	0 1 0	May 1876
20000	Australian, c, South Australia†	7 7 6	2	1½ 2	1 11 0	0 1 6	July 1884
15000	Birdseye Creek, g, California*	4 0 0	1⅜	1¼ 1⅜	1 11 0	0 2 0	June 1885
30000	Bratsberg,* c, Norway†	2 0 0	1	¾ 1	0 4 4½	0 1 2¼	Mar. 1884
30000	California,* g, Colorado	1 0 0	6s.	4s. 6s.	0 3 0	0 1 0	Aug. 1884
120000	Cape Copper Mining,*† South Africa	8 0 0	30	29 30	61 17 6	1 0 0	Mar. 1885
65000	Colorado United, s-l Colorado*†	5 0 0	1¼	1⅛ 1⅞	0 14 6	0 1 0	May 1883
60000	Copiapo, c, Chili* (£4 shares)†	3 10 0	2½	2¼ 2½	2 9 9	0 1 0	June 1885
32200	El Callao, g, Venezuela	40 0 0	70	65 70	36 16 0	0 16 0	Nov. 1884
70000	English & Australian,*† c, S. Aust.	2 10 0	—		3 2 9	0 1 0	Mar. 1884
2000	Eng.-Aus., g, Vict.* pref. (20000 o.)	1 0 0	—		0 3 8	0 3 8	Apr. 1882
25000	Fortuna, l, Spain*†	2 0 0	3	2¾ 3	8 17 1	0 2 10	Mar. 1885
72000	Frontino & Bolivia, g, New Gran.*†	2 0 0	⅛	⅜ ⅛	0 12 0	0 1 0	Dec. 1883
400000	La Plata, s-l, Leadville†	1 0 0	6/-	5/ 6/	0 6 6	0 0 7½	Oct. 1882
15000	Linares, l, Spain*†	3 0 0	4¼	3¾ 4¼	19 16 10	0 3 6	Mar. 1885
20000	Marbella Iron Ore, *, Spain	10 0 0	2¼	1¾ 2¼	0 10 0	0 10 0	June 1882
185164	Mason & Barry* c, Portugal	10 0 0	9¾	9⅛ 9⅜	4 3 0	0 8 0	May 1885
600000	Montana,* g., U.S.A.	2 0 0	1⅞	1⅝ 1⅞	0 0 8	0 0 8	July 1884
120000	New Hoover Hill, g, North Carolina.	0 10 0	7/-	5/ 7/			
125000	Oxford, g, Nova Scotia	0 4 0	⅜	¼ ⅜	0 1 3½	0 0 1¼	Mar. 1884
80659	Quebrada Rail., Land, & Cop. Venezuel	10 0 0	3½	3 3½	6 per cent.	...	1882
50000	Panulcillo, c, Chili*†	4 0 0	2⅝	2¼ 2½	2 0 9	0 2 0	May 1884
25000	Pitangui,* g, Brazil (in. 6000 £1 pd).	0 18 0	⅝	½ ⅝	0 1 0	0 1 0	Sept. 1880
14000	Pontgibaud, s-l, France†	20 0 0	4¾	4¾ 4¾	30 3 1	0 11 3	Dec. 1883
100000	Port Phillip, g, Clunes*† (£2 shares)	1 0 0	5/16	1/16 5/16	1 14 2	0 0 10	Feb. 1881
50000	Rara Fortuna,* s, Argent. Republic.	1 0 0	—		0 3 0	0 1 0	July 1882
54000	Richmond Consol., s, Nevada*†	5 0 0	3⅛	2⅞ 3⅛	15 1 6	0 5 0	Nov. 1884
25000	Rio Tinto,* c, Mortgage Bds., Huelva.	100 0 0	100	97 100	5 per cent.		Apr. 1885
325000	Ditto, shares	10 0 0	10¾	10½ 10¾	4 16 0	0 16 0	May 1885
60000	Santa Barbara,* g, Brazil	0 10 0	1¼	1⅛ 1¼	0 12 9	0 1 0	May 1882
122000	Schwabs Gully,* d, Kimberley	10 0 0	3½	3 3½	6 10 6	0 10 0	Jan. 1885
120000	Scottish-Australian Mining Co.*†	1 0 0	3	2¾ 3	20 p. cent.	0 2 0	Oct. 1884
80000	Ditto, New	0 10 0	1⅛	1¼ 1⅛	20 p. cent.	0 1 0	Oct. 1884
122500	Sierra Buttes, g, California*†	2 0 0	⅞	⅝ ⅞	2 7 0	0 0 6	Oct. 1884
140625	Ditto, Plumas Eureka	2 0 0	1	¾ 1	3 3 6	0 1 6	Oct. 1884
253000	St. John del Rey*† (£5 Stock and multiple dealt in)		67½	72½	5 p.c. for half-year,		June 1882
160000	Tambracherry,* g, Wynaad	1 0 0	⅛	⅛ ⅛	0 0 6	0 0 6	Aug. 1882
625000	Tharsis,* c, sul, Spain (587330 issued)†	2 8 0	5¾	4¾ 5¼	7 6 6	0 8 0	May 1885
14000	Tolima,* g, s, Colombia (A shares)†	5 0 0	3½	2¾ 3¼	6 2 2	0 5 0	Jan. 1885
6000	Ditto (B shares)	5 0 0	2¼	2 2¼	1 5 3	0 5 0	Jan. 1885
25000	Victoria* (London), g, Australia	1 0 0	7s.	5s. 7s.	0 13 10	0 0 8	Feb. 1881
124221	United Mexican,*†‡ s, Mexico	9 17 6	3½	2¾ 3	0 5 0	0 2 6	Nov. 1884
100000	Victorine (Nevada, U.S.) Deb. Bds.	1 0 0	—		0 4 6	0 2 6	Nov. 1884
15000	Western Andes, s, Colombia	5 0 0	5	4½ 5	4 16 3	0 10 6	Aug. 1884
2100	W. Prussian (5500 pref. sh. £10 pd.)	10 0 0	—		4 2 0	0 8 0	Apr. 1881
54800	Yorke Pen., c, South Aust. Pref.†	1 0 0	⅛	⅛	0 3 0	0 3 0	May 1882

§ Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.		Paid.	Last wk.	Clos. pr.
12000	Anderton, t, c, l, Devonshire	0 6 0	⅜	¼ ⅜
12000	Assheton, l, Carnarvonshire*	5 0 0	—	
3200	Blue Hills t, c, St. Agnes§	4 18 6	⅞	¾ 1
10000	Brada,* l, Isle of Man	1 0 0	—	
30000	British,* s-l, bl, Wrexham	1 0 0	—	
20000	British Manganese Company*	1 0 0	—	
10000	Burnhope,* l, Edmondbyers	0 10 0	3	2 3
20000	Bwlch United,* l, Cardigan	1 0 0	—	
12000	Collacombe Consols, c, bl, Lamerton	0 2 6	¼	⅛ ¼
50000	Carn Camborne,* t, c, Camborne	1 0 0	¼	⅛ ¼
37500	Carnarvonshire Cons.,* l, Llanrwst.	2 0 0	⅛	1/16 3/16
6400	Cashwell,* l, Cumberland‡	2 19 0	1½	1¼ 1½
6000	Cathedral, c, t, Gwennap	2 4 0	—	
20000	Central Foxdale,* l, Isle of Man	1 18 6	—	
300000	Clifford Amalgamated	1 0 0	1¼	1⅛ 1¼
25000	Coed-y-Fedw&Pant-y-Buarth,* l	1 0 0	⅞	⅝ ⅞
2450	Cook's Kitchen, t, Illogan†	40 0 9	9½	8¾ 9¼
32007	Craven Moor Uni.,* l. Pateley Bdge	1 0 0	½	⅜ ½
50000	Creigiog,* l, bl, Denbighshire	0 17 0	1	¾ 1
36400	Crook Burn,* l, Cumberland	0 17 0	—	
6000	Deer Park, c.t., Stoke Climsland	2 9 8	—	2⅛ 3
12000	D'Eresby,* l, bl, Llanrwst. £1 share	0 10 0	20s.	1 1¼
12000	Derwent,* l, Durham	4 0 0	—	
60000	Devon Friendship,* c, ars, Tavistock	1 0 0	2/6	1/6 2/6
12000	Devon Great United* (2l. shares)	1 17 6	⅜	⅛ ¾
50000	Drakewalls,* t, c Calstock	0 15 0	5/-	3/ 5/
50000	Duchy Peru,* bl, l, s, Cornwall	1 0 0	1⅛	⅞ 1⅛
12000	East Blue Hills, t, St. Agnes	0 7 0	1¼	1¾ 2
6000	East Botallack, t, St. Just	1 2 6	—	
6144	East Caradon, c, St. Cleer‡	5 5 6	1/6	1/ 1/6
15000	East Devon Cons.,* c, Buckfastlgh.	2 0 0	⅝	½ ⅝
20000	East Long Rake,* l, Wales	1 0 0	—	
25500	East Roman Gravels,* l, Salop	1 0 0	—	
6000	East Tregembo, t, c, Marazion	0 5 2	—	¼ ⅜
18000	East Van, l, Llanidloes*	5 0 0	—	
2048	East Wheal Lovell, t, Helston	3 6	⅜	¼ ⅜
100000	East Wheal Rose,* s-l, Newlyn East	1 0 0	4/-	3/ 5/
25000	Ecton,* c, Wetton	1 0 0	1¼	1 1¼
12500	Frongoch,* l, Cardgn (11000 sh.iss.)	2 0 0	½	⅜ ½
12000	Gawton,* c, Tavistock	2 0	⅜	¼ ⅜
40000	Glasg. Car., c* [30000sh. £1 pd., 10000 15s. pd.]		⅜	¼ ⅜
30000	Gobbett,* t, Devon	1 0 0	—	
10000	Goddards,* l, o, Carnarvon	1 0 0	—	
32000	Goginan,* l, Cardiganshire	1 0 0	⅜	¼ ⅜
25000	Goodevere, t, St. Cleer	1 0 0	1¼	1 1¼
6000	Great West Chiverton, l, St. Agnes.	0 6 6	½	⅜ ½
50000	Great W. Shepherds* l. Cornwall	0 0	1	⅞ 1
20000	Grogwinion, l, Cardigan*	2 0 0	—	
10000	Gwern-y-Mynydd,* s-l, Flint (pref.)	4 0 0	½	¼ ½
8400	Hardshins,* l, Westmore. (10s. sh.)	0 7 6	1	½ 1
12000	Herodsfoot, l, near Liskeard†	1 6 0	¼	⅛ ¼
18000	Hingston Down, c, Calstock*†	0 13 0	¼	⅛ ¼
15000	Holywell District,* l, Flintshire	1 0 0	—	
25000	Kit Hill Gt. Cons.* c, ars-m, (2l. sh.)	1 2 6	⅛	1/16 ⅛
15000	Lady Ann,* s-l, Llanarmon	1 0 0	—	
15000	Llandegla,* l, Wales	1 0 0	—	
5120	Lovell, t, Wendron	2 1 0	⅜	⅛ ⅜
9000	Marke Valley, c, Linkinhorne‡	8 3 0	⅜	¼ ⅜
8000	Mona,* c, Anglesea	5 0 0	—	
20000	Mona Consols,* c, Anglesea	1 0 0	—	
20000	Mostyn Consols,* s-l, Flint	1 0 0	—	
12000	Morfa Du, z, g, s, Anglesea*	1 0 0	—	
80000	Mounts Bay,* c, t, Breage	1 0 0	3/6	2/6 3/6
6144	Mount Carbis, t, c, Redruth	1 19 0	2	1¾ 2
12000	New Caradon, c, St. Cleer	0 8 3	3s.	2s. 3s.
2400	New Cook's Kitchen, t, Illogan	10 12 6	¾	⅜ ⅝
8000	New Dolcoath, t, c, Camborne*	3 0 0	—	
10000	New Holmbush,* t, c, Callington	4 0 0	—	
6000	New Kitty, t, St. Agnes	1 13 0	⅞	¾ 1
25000	New Langford, s, c, Callington	0 4	2s.	1s. 2s.
15000	New Redmoor,* var, Callington	1 0	—	
17500	New Terras,* t, St. Austell	2 0 0	2⅛	2 2⅛
3500	New Tincroft,* t, Lelant	6 0 0	—	
12000	New Trumpet,* t, Wendron	1 0 0	1	¾ 1
80000	New Van Cons. & Glyn,* :,	7 0 0	—	
12000	New West Caradon, c, Liskeard	0 8 9	2/-	3s. 4s
3000	New Wheal Peevor, t, Redruth	0 10 0	—	
12000	North Blue Hills, t, St. Agnes	0 2 6	2s.	1s. 2s.
5328	North Busy, t, c, Scorrier ‡	2 6 8	2s.	1s. 2s.
10000	N. D'Eresby Mount.,* l, bl, Carnarv.	1 0 0	—	
25000	North Goginar,* l, Cardiganshire	1 0 0	—	
6400	North Green Hurth,*	1 0 0	½	¼ ½

NON-DIVIDEND MINES—*continued.*

Shares.		Paid.	Last wk.	Clos.
5000	North Grogwinion,* s-l, Cardigshr.	1 0 0	⅜	¼ ⅜
2000	North Herodsfoot, l, Liskeard	0 13 6	—	
2000	North Levant, t, c, St. Just	14 13 6	—	
60000	North Molton,* c, mn, t, Devon	1 0 0	—	
65000	North Treskerby,* c, St. Agnes	1 0 0	—	
8000	Northern,* l, Durham	8 17 10	—	
40000	Okel Tor,* t, c, a, Calstock	1 0 0	—	
80000	Old Shepherds* s-l, Cornwall	1 0 0	5/6	4/6 5/6
60000	Owen Vean & Tregur.,* t, c, Maraz cn	1 0 0	½	½
30000	Par. * t, St. Austell	0 0	1¼	1⅛ 1⅜
45000	Parys Corporation,* c, Anglesea	1 0 0	1s.	6d. 1s.
7500	Pateley Bridge l, Yorkshire	1 0 0	—	
6000	Pedn-an-drea, t, Redruth	4 10 0	½	¼ ½
20000	Penegarreg, l, Carmarthenshire	1 0 0	—	
10000	Polberro, t, St. Agnes	0 3 0	2½	2 2½
12000	Polcrebo, t, Crowan	0 13 9	2	1¾ 2
10000	Port Nigel Syn.,* s-l, Carnar. (4000 is.)	0 15 0	—	
18000	Pr. Patrick,* s-l, (als. 12000 pf. 10 p.c)	1 0 0	—	
12000	Prince of Wales, s, c, t, Calstock	1 5 6	½	⅜ ½
36000	Russell United,* c, Tavistock	0 9 6	½	⅜ ½
50000	Silver Hill,* Callington	1 0 0	7/16	5/16 7/16
50000	Sinclair,* l, bl, Whitford	1 0 0	½	¼ ½
40000	Sortridge,* c, Horrabridge	1 0 0	—	
50000	South Caradon,* c, St. Cleer†	1 0 0	⅜	¼ ⅜
6000	South Carbis, t, c, Redruth	0 10 0	1⅛	1 1⅛
42000	So. Devon Unit.,* c, Buckfastleigh.	1 0 0	¼	⅛ ¼
5000	South Dolcoath, c, t, Illogan	0 19 0	¾	½ ¾
6000	South Kitty, t, St. Agnes	0 10 0	½	⅜ ½
6000	South Penstruthal, t, c, Gwennap	4 2 6	⅜	⅜ ½
30000	So. Phœnix & Caradon,* t, c, Linkinhn.	1 0 0	¾	½ ¾
6000	South Tolcarne, t, c, Camborne	5 11 6	½	¼ ½
2043	South Wheal Crofty, c, Illogan	8 2 6	4¼	3½ 4
4500	South Wheal Frances, t, Illogan†	11 4 4	9¾	9 9½
30000	Standard,* l. bl., Llanrwst	1 0 0	1½	1¼ 1½
40000	Tamar, s-l, Bearalston*	1 0 0	—	
6000	Tolgullow United, St. Day	...	1¾	1¼ 1¾
12000	Trebartha Lemarne, t, Northill	0 11 0	—	
6000	Tregembo, t, c, Cornwall	4 0 0	—	
50000	Tregontrees and Old Polgooth Con.	1 0 0	½	⅜ ½
100000	Tresavean,* t, c, Gwennap	1 0 0	5s.	3/ 5/
8000	Trevaunance, t, St. Agnes	0 12 6	2	1¾ 2
1000	Vaughan,* l, Cardiganshire	10 0 0	—	
30000	Van,* l, Llanidloes	0 10 0	1⅛	⅞ 1⅛
50000	Weardale,* l, Northumber. (4l. share)	1 5 0	1⅛	1 1⅛
12000	West Assheton, l, Carnarvon	1 0 0	—	
12000	West Caradon, c, St. Cleer	0 13 6	3s.	2s. 3s.
30000	West Cornwall,* t, Cornwall	1 0 0	1⅛	1 1⅛
12000	West Crebor, c, Tavistock	0 13 0	2s.	1s. 2s.
10240	West Devon Consols, c, Calstock	1 2 0	¼	⅛ ¼
10000	West Godolphin, t, c, Breage	1 4 6	1¼	1 1¼
12000	West Gonamena, c. St. Cleer	0 1 0	—	
20000	West Lisburne,* l, Cardigan	1 0 0	—	
3000	West Mary Ann, l, Menheniot	1 18 0	¼	⅛ ¼
20000	W. Pateley Bridge, l, Yorkshire	1 0 0	—	
12000	West Phœnix, t, Linkinhorne	1 7 6	¼	⅛ ¼
6000	West Polbreen, t, c, St. Agnes	0 12 0	¾	½ ¾
6144	West Wheal Frances, t, Illogan‡	14 10 1	8½	7¾ 8¾
3000	West Wheal Peevor, t, Redruth	4 17 6	¾	½ ¾
2400	West Wheal Seton, c, Camborne†§	21 10 0	5	5¼ 5¾
6144	Wheal Basset, c, Illogan‡	9 7 6	9⅛	9 9⅛
4000	Wheal Benny, t, c, Latchley	5 0 0	7	6½ 7
3000	Wheal Boys, t, Redruth	1 3 6	—	
50000	Wheal Castle,* c, t, St. Just	1 0 0	1	¾ 1
12000	Wheal Coates, t, St. Agnes	0 12 0	3/16	⅛ 3/16
2585	W. Comf., & No. Tres., t, c, Gwennap	2 2 0	¼	⅛ ¼
50000	Wheal Elizabeth,* t, Cornwall	1 0 0	—	
12288	Wheal Jane, t, Kea‡	3 11 0	3s.	2s. 3s.
12000	Wheal Jewell, c, St. Hilary	1 0 6	¼	⅛ ¼
12000	Wheal Lusky, t, Callington	0 3 9	3/16	¼ 3/16
12000	Wheal Metal and Flow, t, Breage	0 3 6	¾	⅞ 1
2000	Wheal Owles, t, St. Just‡	8 3 0	—	
30000	Wh. Silver & Lanteglos,* s-l, Cameifd.	1 0 0	⅝	⅜ ⅝
6000	Wheal Sisters, t, Lelant	4 17 6	—	
4096	Wheal Uny, t, c, Redruth	27 7 0	½	¼ ½
21866	Wye Valley, l, Montgomery.*	1 0 0	—	
60000	Yeoland Consols,* t, Devonshire	0 12 6	—	
4000	Ystwith,* l, Cardigan	1 0 0	—	

bl, blende; *c*, copper; *g*, gold; *l*, lead; *s*, silver; *sl*, slate. *s-l*, silver-lead; *t*, tin; *z*, zinc; *i*, iron; *a*, arsenic; *d*, diamond. *Limited Liability Companies; † quoted on the Stock Exchange. ‡ have paid dividends.

NON-DIVIDEND FOREIGN MINES.

Shares.		Paid.	Clos. pr.
150000	Akankoo,* g, Gold Cst. (100000 iss.)	1 0 0	3/16 5/16
64889	Anglo-African,* d, Kimberley,†	10 0 0	¾ 1¼
12000	Arendal, c, Norway	4 0 0	
30000	Asia Minor,* s-l, Lidjessy, Sivas	0 17 6	1/16 ⅛
200000	Balkis,* g, Transvaal	1 0 0	1/3 1/9
28000	Belt,* c, Lake Sup., (22000 £4 paid)	5 0 0	
200000	British Australian,* g, N. So. Wales	1 0 0	
10000	Buena Ventura,* l, Spain (fy.pd)	2 0 0	
180000	Callao Bis,* g, Venezuela	1 0 0	10/ 12/6
182500	Canadian, c, sul,* Canada†	4 0 0	1/16 3/16
500000	Chile,* g, Venezuela (New)	1 0 0	4/ 6/
125000	Chontales, g, s, Nicar.*† (108749 iss)	1 0 0	1/16 3/16
75000	Colombian Hydraulic, g, Colombia	1 0 0	10s. 12s.
200000	Devala Moyar,* g, Wynaad†	1 0 0	⅛ ¼
75000	Devala Provident,* g, Wynaad†	0 10 0	
25000	Don Pedro North del Rey*	1 0 0	2s. 3s.
214000	Eberhardt, s, Nevada*†	1 0 0	⅛ ¼
65000	Eureka,* s, Nevada	1 0 0	
40000	Georgia,* g, United States	1 0 0	
65000	Gold Coast,* g, Wassau	1 0 0	
40000	Gold Hill,* g, North Carolina	1 0 0	
12000	Hultafall,* l, bl, Orebro, Sweden	5 0 0	
550000	Indian Consolidated,* g	1 0 0	⅛ ¼
240000	Ind. Glenrock,* g, Wynaad†	1 0 0	⅛ 5/16
100000	Iron Gate* cl. chr. Hungary	1 0 0	
100000	I.X.L., g, s, California*	1 0 0	1/16 3/16
60000	Javali, g, Nicaragua*	2 0 0	
100000	Kapanga,* g, New Zealand	1 0 0	⅛
100000	Kohinoor,* s, Colorado	1 0 0	5/ 6/6
120000	Kongsberg,* s, Norway (1l.)	0 5 0	
100000	La Trinidad,* s, Sonora, Mexico	5 0 0	5¾ 5¾
500000	Lisbon-Berlyn,* g, South Africa	1 0 0	1/3 1/9
65000	London and California, g*†‡	2 0 0	
100000	Michipicoten,* nat. c, Quebec	1 0 0	
50000	Moselle,* l, b-l, Germany	1 0 0	
135000	Mysore,* g, India†	1 0 0	1⅛ 1¾
75000	New Callao,* g, Venezuela	1 0 0	4/ 5/
78500	New Emma,* s, Utah	10 0 0	¼ ½
300000	New Potosi,* g, Venezuela†	1 0 0	⅛ ⅜
180000	North Mexican, s, Mexico	1 0 0	
3000	Do. debentures do.	7 0 0	11 12
100000	Nundydroog,* g, Mysore	1 0 0	8s. 10s.
50000	Olathe,* s-l, Leadville, Colorado	1 0 0	
25000	Ooregum,* g, Mysore	1 0 0	1/6 2/6
12000	Oregon, g, U.S. (4000 prf. sh.)	0 2 6	
15000	Organos,* g, Colombia	1 0 0	6/3 8/9
20000	Orita,* g, Colombia	1 0 0	⅞ 1
75000	Oscar,* g, Norway (£1)	0 17 6	10/ 12/6
80000	Ouro Preto* g, Brazil	5 0 0	
80000	Pestarena United, g, Italy*†	3 0 0	⅛
80000	Pierrefitte* (20000 pref.)	1 0 0	
100000	Placerville, g, q, California	1 0 0	1¾ 2¼
40000	Ravenscliff g, N. Zlnd; c, S. Aust.	1 0 0	
90000	Rhodes Reef,* g, Wynaad†	1 0 0	1/16 3/16
25300	Ruby and Dunderberg, g, Nev.*†	10 0 0	3/6 4/6
250000	Sentein,* s-l, bl, Ariège, France	1 0 0	
100000	Silver Chord,* s, Colorado	1 0 0	¾ 1
50000	Silver Peak,* s, Colorado	1 0 0	⅛ ⅜
107363	So. Austral. Cop. Mines (Corp. of)	1 0 0	1/6 2/6
10000	South-East Wynaad, g, India†	1 0 0	
100000	Spitzkop,* g, Transvaal	1 0 0	9/16 11/16
100000	Tocopilla,* c, Bolivia	0 1 0	⅛
200000	Transvaal,* g South Africa	1 0 0	3s. 5s.
50000	Virneberg, c, Rheinbreitb., Ger.*	2 0 0	
200000	Victoria,* g, Venezuela	1 0 0	7s. 9s.
60000	Violeta,* g, Spain	1 0 0	1⅜ 1⅝
20000	Wentworth,* g, Wynaad	0 16 0	3/16 5/16
75000	West Callao,* g, Venezuela	1 0 0	2/ 3/
100000	West Frntno & Boliv.,* g, Colombia	1 0 0	
80000	Wynaad Perseverance,*† g	1 0 0	
75000	Yorke Peninsula, c, So. Australia†	1 0 0	⅜
50900	Yuba River,* g, hyd California	1 0 0	

MISCELLANEOUS.

Shares.	Company.	Paid.	Price.
10	Anglo-American Brush	8 0	1⅛ 1⅜
10	Ditto do.	10 0	3 3⅛
60	Lon. & Glas. Engin. & Iron Ship	25 0	15 18
10	Noble's Explosives [L]	10 0	16 17
5	Swan United Electric	3 0	¼ ½
12	Tel. Con. & Maintenance [L]	12 0	35⅛ 36½
10	United Asbestos	10 0	
10	Young's Paraffin Light & M O.	8 0	11⅛ 12½

HOME RAILWAYS.

ORDINARY SHARES AND STOCKS.

Present amount.	Fully pd. Stk. or sh.		Closing quotation. Last week.	Last night.
10,856,970	Stock	Caledonian	98¾	99 99½
14,991	£20	Cornwall	5½	4⅛ 5½
375,000	Stock	Cornwall Mineral	11	8 10
2,642,000	,,	Furness Consolidated	105	100 103
4,927,900	,,	Glasgow & So.-Western	99	97 99
12,354,547	,,	Great Eastern	63⅞	62⅞ 63⅛
8,867,977	,,	Great Northern Consol.	114	112 114
1,159,275	,,	ditto "A"	101	100 101
1,159,275	,,	ditto "B"	151	148 151
1,000,000	,,	ditto Def., div. to accrue from Mar. 1, '85	113	111 113
19,211,670	,,	Great Western	134¾	134¾ 135¼
1,722,995	,,	Highland	—	
300,000	10 sh.	Hull and Barnsley	4⅜	4¼ 4½
15,392,995	Stock	Lancashire & Yorkshire	114⅛	112 113
3,156,300	,,	Lon., Brigh., & S. Coast	117	115 117
2,171,850	,,	ditto Preferred	140	139 141
2,171,850	,,	ditto Deferred	96¼	95¼ 95¾
11,123,051	,,	Lon., Chat., & Dov. Arb.	16⅜	15⅞ 16⅛
36,784,827	,,	Lon. & No.-West. Con.	164¾	164¾ 165¼
9,784,161	,,	London & So.-Western	128½	128½ 129½
—	,,	Lon., Til., & Southend	155	154 157
5,833,836	,,	Man., Shef., & Lincoln.	69	66 68
	,,	ditto Preferred	103	101 103
	,,	ditto Deferred	34	32 32½
5,281,830	,,	Metropolitan	104	107½ 108½
83,270	,,	ditto Preferred	—	
83,270	,,	ditto Deferred.	—	
2,250,000	,,	Metropolitan District	46½	47¼ 47¾
26,428,079	,,	Midland	133½	133 133½
4,625,869	,,	North British	92¼	92 92½
22,812,333	,,	North-Eastern Consol.	152	150¾ 151¼
3,230,140	,,	North Staffordshire	87½	86½ 87½
237,480	,,	Rhymney	142	142 147
3,170,870	,,	South-Eastern	118	116 118
2,869,670	,,	ditto Preferred	142	141 143
2,869,670	,,	ditto Deferred.	91½	90 90½
1,403,200	,,	Taff Vale	255	260 265

BANKS.

Issue.	Shares.		Pd.	Clos. pr.
100000	10	Agra [L]	all	9½ 10
80000	20	Anglo-Egyptian Banking [L]	all	16 17
40000	40	Bank of Australasia	all	93 95
12500	20	Bank of British Columbia	all	22 23
20000	50	Bank of British North America	all	58 60
19000	25	Bank of Egypt	all	22 24
15000	20	Bank of New South Wales	all	67 69
100000	10	Bank of New Zealand	all	26 27
32000	25	Bank of South Australia	all	40 41
20000	50	Bank of Victoria	25	34 36
40000	20	Chartrd. of Ind., Aust., & China	all	21½ 22½
30000	25	Ch. Merc. of Ind., Lond., China	all	19½ 20½
20000	100	Colonial	30	48 52
50000	20	English Bk. of Rio de Janeiro [L]	10	12 13
60000	25	London and River Plate [L]	10	13 14
60000	7	London and San Francisco [L]	all	4½ 5½
150000	20	London Chartered of Australia	all	20½ 21½
100000	10	National Bank of N. Zealand [L]	3⅛	2¾ 3¼
30000	10	Queensland National [L]	5	11¼ 11¾
40000	100	Stndrd. of South Africa [L].	25	38 40
60000	75	Union of Austra	25	73 75

TELEGRAPH COMPANIES.

Shares.		Pd.	Clos. pr.
Stk.	Anglo-American	100 0	27 28
10	Brazilian Submarine	10 0	11⅛ 11⅜
10	Cuba	10 0	11¾ 12¼
10	Direct Spanish	9 0	1½ 2
20	Direct United States Cable	20 0	8¾ 9
10	Eastern	10 0	11½ 11¾
10	East. Exten. Austr. and China	10 0	12⅝ 12⅞
10	German Union	10 0	9¼ 9¾
10	Great Northern of Copenhagen	10 0	14¼ 14¾
25	Indo-European	25 0	30½ 31⅛
10	London Platino Brazilian	10 0	3¼ 3¾
8	Reuter's [L]	8 0	7½ 8
Stk.	Submarine	100 0	180 190
	United Telephone [L	5 0	12¼ 12¾

IRON AND COAL COMPANIES.

Shares.	Company.	Paid.	Price.
100	Abbot, John, and Co.	75 0	44¼ 44½
100	Ashbury Co. [L] (new)	90 0	30 31
3	Bagnall, John, and Sons [L]	3 0	
10	Benhar Coal Co. [L]	10 0	
10	Bilbao River & Cantabrian R. Co.	10 0	6¾ 7¼
20	Bolckow, Vaughan, & Co. [L] A	12 0	7 7½
50	Brown, Bailey, and Dixon [L]	40 0	
100	Brown, John, and Co. [L]	75 0	63 63½
100	Cammell and Co. [L]	80 0	75¾ 76¼
20	Cannock & Huntington Coal [L]	10 0	10⅛ 10 dis
10	Central Swedish Iron & Stl. [L]	10 0	
50	Chariton Iron Co. [L]	50 0	
10	Chillington Iron Co. [L]	10 0	1/16 3/16
10	Consett Iron Co. [L]	7 10	17 19
1	Consett Spanish Ore [L]	1 0	4½ 4¾
20	Darlington Iron Co. [L]	18 10	23/ 25/
23	Ebbw Vale Co. [L]	20 0	3¾ 4
5	English Crown Spelter [L]	5 0	1½ 2
8	Genl. Mining Ass. [L] (fu.pd.)	8 0	4 5
60	Knowles, Andrew, and Co. [L]	5 0	4¾ 5
20	Llynvi and Tondu [L]	20 0	1½ 2
10	Lydney & Wigpool Iron Ore [L]	9 12	⅛ 1
10	Midland Iron Co. [L]	5 0	
10	Monkland Iron & Coal Co. [L]	10 0	2½ 3
4	Mwyndy Iron Ore [L]	3 15	⅛ ¼
62½	Nant-y-Glo & Blaina (8p.c.prf.)	62 10	40 42
3	Nerbudda Coal and Iron [L]	9 0	1⅝ 1⅞
10	Newport Abercarn Coal Co. [L]	10 0	8 9
35	Palmer's Shipbldg. & Iron [L]	35 0	22¾ 23¼
100	Parkgate Iron Co. [L]	67 0	59½ 60½
20	Patent Nut and Bolt [L]	14 0	28¾ 29¼
50	Pearson and Knowles, B,	50 0	25 30
20	Pelsall Coal and Iron [L]	20 0	5½ 6½
5	Rhymney Iron Co. [L]‡	5 0	½ ¾
16000	St. Helen's Coal & Clay Co. [L]	1 5	
10	Sandwell Park Colliery Co. [L]	10 0	
100	Shotts Iron Co. [L]	100 0	35 40
25	Sheepbridge Iron and Coal [L]	22 0	4¾ 5¼
50	Silkstone & Dodw. Cl. & Iron [L]	45 0	
15000	Somorrostro Iron Co. [L]	5 0	12 15
100	Staveley Iron and Coal Co. [L]	60 0	49½ 50½
100	Ditto ditto B	10 0	8½ 9
5	Teesside Iron & Engine Works	5 0	¼ ½
60	Tredegar Iron and Coal, A [L]	36 0	17 18
25	Ditto ditto B	25 0	16½ 17½
10	Vancouver Coal [L]	8 0	2 3
25	W. Cumberland Iron & Steel [L]	22 0	3⅝ 3⅞

TRAMWAYS.

Issue.	Shares.		Pd.	Clos. pr.
40000	5	Anglo-Argentine [L]	all	5¾ 6¼
10000	10	Barcelona [L]	all	9 10
12600	10	Belfast Street Tramways	all	11¾ 12¼
3012	10	Birkenhead, Ordinary	all	1½ 2
3000	10	Ditto, 6 per cent. Preference	all	4½ 5½
49600	2	Brazilian Street Railways	all	1⅜ 1⅝
10000	10	Bristol [L]	10	7½ 8
25000	10	Bordeaux Tram & Omnibus [L]	all	8½ 9
30050	10	Calcutta [L]	all	3½ 4½
3200	10	Chester [L]	all	
54870	10	Dublin	all	9¼ 9¾
28889	10	Edinburgh Street Tramways	all	10¾ 11¼
35000	10	Glasgow Tramway & Omni. [L]	9	15 15½
000	10	Hughes Loco. and Tram. works	all	
8073	10	Hull Street Tramways	all	8½ 9
17770	6	Imperial [L]	all	1 1½
40000	10	Liverpool Unit. Tram & Om. [L]	all	11½ 12
35890	10	London [L]	all	16½ 17
20900	10	London Street Tramways	all	18½ 19
77000	10	North Metropolitan	all	18¾ 19¼
7935	10	Nottingham and District [L]	all	7½ 8½
24500	10	Provincial [L]	all	7 7½
8000	10	Sheffield	all	5 6
5000	10	Southampton	all	7¼ 7¾
6000	10	Sunderland [L]	all	2¾ 3¼
10000	10	Swansea [L]	all	
14212	10	Tramways of France [L]	all	2¾ 3¼
13817	10	Tramways of Germany [L]	all	12¾ 13¼
20000	5	Tramways and Gen. Works [L].	all	¾ 1¼
40000	5	Tramways Union [L]	all	3¾ 4¼
25000	10	Vale of Clyde	6	
8259	10	Wolverhampton [L]	all	5 6

FINANCIAL AND INVESTMENT.

Issue.	Shares.		Pd.	Clos. pr.
49150	10	Aus. Mort. & Agency [L] Eng. issue	2	2⅛ 3
20000	25	Australian Agricultural	21½	130 135
100000	10	Aust. & New Zealand Mort. [L] Shs	1	1⅛ 1⅜
101960	Stk	Do. 4½ per cent. Deb. Stock	100	99 100
80000	25	Aust. Mort. Land & Finance [L]	5	17 18
592000	Stk	Do., do. 4 per cent. Deb. Stock	100	101 103
8402	1	Canada Company	1	85 88
263425	10	Canada North West Land Co. [L]	5	1¼ 1¾
130000	1	Central Argentine Land [L]	1	2 2¼
77000	5	Colon. Inv. & Ag. of N. Zealand [L]	1	1⅛ 1⅜
1202456	Stk	Foreign & Col. Gov. Trust [L] Pref.	100	119 123
1106756	Stk	Do. Deferred	100	118 122
200010	6	General Credit and Discount [L]	3½	3⅛ 3¾
25000	10	Land Corporation of Canada [L]	3	¾ 1¼
100000	½	London & S. African Explor. [L]	½	6½ 7
36036	50	London Financial Association [L]	42½	2 3
45000	10	Manitoba Mort. & Invest. [L]	1	½ ¾
100000	10	Queensland Invest. & Land Mort.	2	3¼ 3⅝
400000	Stk	Scottish Australian Invest. [L]	100	220 230
200000	Stk	Do. 5 p. c. Guaranteed Pref.	100	112 117
200000	Stk	Do. 6 per cent. do.	100	132 137
100000	10	S. Aust. Land Mort. & Agency [L]	2	3¼ 3½

INSURANCE COMPANIES.

Issue.	Shares.		Pd.	Clos. pr.
1000	100	Alliance Marine	20	23 25
50000	20	British and Foreign Marine [L].	4	22 23
550000	50	Commercial Union	5	16 17
50000	50	Eagle	5	6 6½
5000	10	Globe Marine [L]	2	1¼ 1¾
27500	100	Imperial Life	10	23 25
13453	100	Indemnity Marine	50	14½ 15½
100000	10	Lion Fire [L]	1¼	⅝ ⅞
49626	20	L'pool & Lond. Globe (£1 annty)	2	24 25
35862	25	London	12½	45 47
40000	25	London and Lancashire Fire	2½	3 3½
50000	20	London and Provincial Marine [L]	2	3¾ 4¼
40000	25	Marine [L]	4½	28½ 29½
50000	10	Merchants' Marine [L]	2	1 1⅛
50000	10	Maritime [L]	2	3¼ 3¾
100000	25	North British and Mercantile	6¼	28½ 29½
30000	100	Northern	10	40 42
40000	25	Ocean Marine	5	4¾ 5¼
6722	—	Phœnix	—	204 209
200000	10	Queen	1	2 2¼
100000	10	Railway Passengers	33s.	8 8½
200000	50	Rock Life	⅛	7¼ 7¾
50000	10	Sea	2	—
135000	20	Lancashire	2	4¾ 5¼
4000	20	Standard Marine	4	—
100000	20	Thames and Mersey Marine [L].	2	11½ 12
40640	20	Union Marine, Liverpool [L]	3½	4½ 5
50000	20	Universal Marine [L]	3	8 8½

GAS COMPANIES.

Issue.	Shares.		Pd.	Clos. pr.
5000	20	Bahia [L]	all	24½ 25½
510000	5	Bombay [L]	all	6½ 7
10000	5	Ditto, New [L]	4	5 5½
29700	Stk	Brentford Consolidated	100	212 217
14000	20	British Gaslight [L]	all	42 44
50000	Stk	Commercial Consolidated	100	259 264
20000	20	Continental Union [L] Orig.	all	39 40
20000	20	Do. do. New, 1869, 1872	14	27 28
10000	20	Do. do. 7 per ct. Preference	all	30 32
23406	10	European [L]	all	21½ 22½
94850	Stk	Gaslight and Coke, A, Ord.	100	234 238
284200	Stk	Do, 4 per cent. Deb. Stock	100	106 109
5000	10	Hong Kong and China	all	18 19
2800000	Stk	Imperial Continental	100	207 211
12000	5	Malta & Mediterranean [L]	all	4½ 5
100000		Metrop. of Melbourne 6 p.c. Deb.		
25000	20	Monte Video [L]	all	16½ 17½
10000	5	Ottoman [L]	all	5⅛ 6⅛
30000	5	Oriental [L]	all	8⅛ 9
27500	20	Rio de Janeiro [L]	all	23½ 24½
500000	Stk	South Metropolitan, A	100	272 277
50000	Stk	Ditto, ditto. B	100	230 235

COLLIERY EXPLOSION NEAR MANCHESTER.

NEARLY TWO HUNDRED LIVES LOST.

HEROIC CONDUCT OF THE MEN.

A terrible mining disaster, resulting in a great loss of life, occurred on Thursday morning in the village of Pendlebury, about three miles from Manchester. The scene of the accident is the Clifton Hall Pit, one of a series of collieries owned and worked by Messrs. Andrew Knowles and Co (Limited). The pit hitherto has had the best reputation. It has been known as an eminently safe one, and has been so free from dangerous gases that in some parts it has been no uncommon thing for the men to use naked lights. The main shaft is 540 yards deep, and from it access is gained to three mines—the Trencherbone, which is the lowest, the Doe, and the Five-Quarters. From one of these, again, there is communication with the Agecroft Colliery, about ½ mile distant. The number of men usually employed in the mine is 380, and of these 349, including 27 boys, went down the pit between half-past 5 and 6 o'clock this morning. It is believed that about 160 went to work in the Trencherbone Mine, and that the remaining 189 were divided between the Doe Mine and the Five Quarters Mine. The seam in the Trencherbone Mine is in quality and nature very like that known as the Wigan Nine-Foot, which has a terrible notoriety among the miners. The work of the pit went on as usual until shortly before half-past 9 o'clock, when those at the mouth of the shaft were startled by seeing a sheet of flame and a cloud of smoke and dust shoot from the pit's mouth, followed by a loud report. The force of the explosion tore some of the surface plates from their places, and hurled part of the ironwork of the cages up the shaft and on to the ironwork which protects the pulleys overhead. By this means some parts of the woodwork which supports the pulleys were smashed. When the explosion occurred the cages must have been passing each other in the centre of the shaft, for upon an attempt being made by those above to communicate with those below, it was found that the cages were locked and were immovable by the engine. The manager of the colliery, Mr. Jonathan Hall, and two of his men who were gallantly attempting a descent, being foiled in this direction made use of the kibble, a kind of small cage, which is worked by a little pulley hanging between the two chief pulleys, and went down the pit to the spot where they were stopped by the cages. Their united efforts were insufficient to stir the cages, so they returned to the surface, only, however, shortly afterwards to re-enter the pit armed with implements of various kinds, with which, after some hard work, they succeeded in liberating the cages.

Upon these men leaving the shaft an exploring party of three—Aaron Manley, pitman, Thomas Horsfield, banksman, and Hindley, a blacksmith—was formed, went to the bottom of the pit in the kibble, and inspected the ground within the area of a few yards only. The scene was a melancholy one, and confirmed their worst fears as to the magnitude of the disaster. Some 50 men and boys were lying about in various positions—some dead, others alive, but fearfully injured, and all blackened and scorched almost beyond recognition. Leaving Hindley at the bottom, Horsfield and Manley hastened to the top, and communicated to Mr. Hall and Mr. Simon Horrocks, the principal agent of the firm, the result of their inspection. These gentlemen speedily organised seven exploring parties, one for each of the separate workings, and accompanied two of them to the bottom of the pit, where the task of rescuing the living and removing the dead was at once entered upon. The self-imposed duty was at once a difficult and a dangerous one. The fact that the furnaces were extinguished by the blast put an immediate stop to the artificial ventilation of the pit; and, although without the aid of heat there is a fair amount of ventilation, the recent passage of the noxious gas along the workings, and consequent after-damp, rendered the atmosphere extremely disagreeable, if not injurious. Beyond this, the force of the explosion had, in many places, torn the roofing and supports from their places, had broken up the flooring of the workings, and had thrown down the walls, so that the explorers were hampered in every direction. So complete was the destruction wrought by the explosion that it was found impossible by the explorers to penetrate for a greater distance than 100 or 150 yards along any of the workings. The first of the imprisoned men who were reached escaped by way of the passage leading to the Agecroft Colliery, and were taken up from the pit there. This was about 11 o'clock. All of these had been working in the Doe and Five Quarters Mines, and it was evident from their stories that the explosion had taken place in the Trencherbone Mine. After the first batch had been removed but slow progress was for a time made, and then they came up in larger numbers, so that by noon 116 men and boys had been brought up this pit. They were for the most part but slightly injured, and were at once removed to their homes.

The knowledge of what had occurred spread rapidly in the district, and a large crowd of people from all parts of Pendleton gathered and watched the proceedings. The work of rescue at this end of the workings was stopped at 2 o'clock, and by which time 122 live and nine dead men and boys had been brought up the Agecroft shaft. Many of those who were fortunate enough to escape without mortal injury were sick and faint with their long exposure to the afterdamp, and others had received in their flight blows which caused wounds of a more or less serious character. One little lad named Joseph Judson was found to have sustained a fracture of the skull, and he was taken to the Pendleton branch of the Salford Royal Hospital, where he died immediately after admission. Of the nine dead men removed from Agecroft most of them seemed to have met their death by drowning, and others had evidently been choked by the foul gas which caused or followed the explosion. Of these eight were identified.

While so much good work was being done at Agecroft, the men at Clifton Hall were equally busy. The medical men practising in the district early heard the sad news, and without loss of time repaired to the scene of the explosion. Mr. Oliver Heywood also attended with Miss Cobb (the superintendent of the Children's Hospital) and half-a-dozen "sisters" from the same institution, who took with them lint, bandages, and other surgical appliances likely to be of use. The clergy of the neighbourhood also appeared on the scene, actuated by a desire to afford consolation to the suffering and the bereaved. It was half-past 11 o'clock before any of these volunteers had an opportunity of rendering any service. At that hour three or four men were brought to the surface, but their injuries were such that little assistance could be given by nurse or doctor, and they were at once removed to their homes. Others rapidly followed, and soon the cages were in constant work bringing men up to the pit. As the bodies of the dead were brought to the surface they were carried to a stable, where the work of identification was carried on with difficulty. The building was not well lighted, and the windows were constantly blocked by anxious faces, striving to pierce the dark back-ground, where 13 dead men lay. The face of one was white, and he had evidently been drowned; but all the others were black and scorched, while from one poor fellow the clothes had been ripped by the force of the blast. Frequently the first claim put in by the distressed relatives proved unfounded. There were no extravagant demonstrations of grief; but the subdued sobbing of the children, the blank dismay depicted on the faces of the women, and the settled melancholy visible in the men, told how deeply they felt the loss they had sustained. The closest inspection was necessary; the heads of the dead were raised by a kindly collier, while a sympathising colleague threw the rays of a safety lamp upon the upturned features.

After 2 o'clock in the afternoon the exploring party met with no further success. The explorers were constantly being changed, it being impossible for the men to remain for any great length of time in the workings. Every effort was made to penetrate to the distant parts, and some success was gained in the direction of Doe and Five Quarters Mines; the Trencherbone Mine, however, continued to be unapproachable. By this time the belief became prevalent that the men who worked in the two first-named mines had been rescued, that the bodies of such as had died in them had been removed; and the authorities reluctantly came to the conclusion that those in the Trencherbone Mine were beyond the need of assistance. The atmosphere of the mine now became worse, and the explorers worked with difficulty. Many of them upon coming to the surface were quite exhausted. There were plenty willing and able to take their places. The last batch of rescuers went down the mine shortly before 4 o'clock. It was composed of 30 men, and was joined at the bottom by George Hickson, a fireman, who throughout the day displayed the coolest courage and the noblest heroism. His special duty it was to manipulate the signals between the bottom of the shaft and the engine-house above. He had entered the mine at 4 o'clock that morning; he was in it when the explosion occurred, and he stedfastly refused to leave it, declaring that the signals were under his care, and he would remain and see that they were worked properly for the convenience of rescuers and rescued.

After the last party had been down the mine a few minutes those above were terrified at observing that a change had taken place in the course of the ventilation, the smoke coming up the pit shaft, and the air going down the ventilating shaft. This was regarded as a certain indication that either another explosion had occurred or that there had been a heavy fall of earth, and the liveliest fears were excited as to the safety of the exploring party. Again and again the signal to the bottom of the pit was rung, but no reply was forthcoming, although Hickson had declared his intention of never deserting his post. Proper ventilation appeared to be restored in the course of a few minutes. After about half-an-hour it was determined to send a small party down to endeavour to ascertain the fate of the previous explorers. Thomas Roberts, James Topping, Aaron Manley, and Thomas Rushton volunteered for the dangerous task, and getting into the cage, broken as it was by the morning explosion, they were slowly lowered down the pit. Everybody was ordered away from the mouth of the pit, as a second explosion was momentarily expected. Presently the signal to stop lowering the cage sounded, and then came the "draw up" signal. With one impulse the bystanders ran to the shaft to greet the four men, who were rapidly pulled up. They reported that when they had gone down a distance of about 150 yards, and had reached the opening of the Binn's Level, they met a dense volume of gas, and were compelled to return. They conjectured that the whole of the bottom of the shaft was filled with this gas, and that all the exploring party must have fallen victims to its deadly influence. The people were once more cleared away from the shaft, and the managers and others entered into a consultation with Mr. Dickinson, the Inspector of Mines, who had been on the spot since early morning, as to the best course to be adopted. It was deemed too risky to send down another exploring party, but, fortunately, the grave fears entertained for that which was down was dispelled, but not for some time afterwards. It seems that they found escape by the Clifton Hall Pit impossible, and made their way to the Agecroft Pit, by which, after encountering a good deal of danger, they escaped.

Later on a descent was made as far as the Binn's Pit, and it was found necessary to build up the entrance to the pit, in order to restore ventilation to the Trencherbone Mine. Material for doing this was at once sent down, but the work was expected to occupy the men for several hours, and whilst this was proceeding the crowds on the pit bank gradually dispersed, all hope of anyone else being found alive having to be abandoned.

Thomas Worrall, the surviving underlooker, gives a graphic account of the accident. He was superintending operations in the Doe Mine, about 440 yards from the pit mouth. When the explosion occurred the force of the blast knocked him and all the men and boys who were near him to the ground. Props were demolished, movable timber was hurled in all directions, and a number of wagons were lifted out of their places and overturned. One of the wagons fell upon a boy and crushed him severely. Worrall was rendered unconscious by the force of the shock, and when sensibility returned he saw the colliers running for their lives to the pit eye. Instinctively realising that there were no means of escaping in that direction, but rather danger of suffocat on by after-damp, Worrall instructed the men to make their way toward the Agecroft shaft. The men at once obeyed him, and begged Worrall to accompany them. This, however, he refused to do, declaring that some one ought to remain as guide to those who, having escaped the fury of the explosion, were yet unable to find their way to the upper ground. The brave fellow at once assumed authority over the panic-stricken workers in the Doe and Five-Quarters Mine, and undoubtedly, by preventing them from rushing to the Clifton Hall shaft, saved many of them from death by suffocation. He stood at his post until he had reason to believe that every man in the particular mines in which he is underlooker had been sent to the pit bank. The fright of the boys, and some of the men, he said, was painful to behold. One had become delirious with fear, and began to repeat, school-boy fashion, the letters of the alphabet. The men sighed and moaned, some shouted for help, and others muttered words of prayer. All were profoundly thankful to find some one to direct them, one cool and clear-headed enough to calculate the chances of escape, and self-denying enough to remain at the post of danger until those under his care were rescued. When at last Worrall got to the main shaft he found the air moderately pure. The pit bottom was strewed with the dead and wounded. The men working in the immediate vicinity of the pit eye had been blown in all directions. Some had been killed by the shock, and lay as they fell in different postures. Others stifled by the deadly gas had fallen on their faces and seemed as if asleep. The injured were in great pain, and uttered piteous cries. As soon as he saw how matters were, Worrall ran for a cage. This was just before the first exploring party entered the mine. The signal created intense excitement, and willing hands hastened to render assistance. By such signals as were possible before the cage went down Worrall had made it known to odd parties still arriving from distant parts of the Doe Mine that the Lamb Pit shaft was available for ascent, and by the time the explorer Maudsley and his brave companions arrived from the bank there were about 20 survivors gathered at the eye, anxiously peering towards the speck of light from which they expected the means of deliverance. The injured were first sent up, Worrall remaining to the last. When he arrived at the pit bank one of his first enquiries was whether the lad upon whom the cage was blown had been saved; he was told that the boy had been taken out and removed to the hospital.

Those men who were near the tunnel running from the Trencherbone to the Doe Mine say they were first aroused by a strong rush of light, and that before the universal question "What's up?" could be answered all their lamps were extinguished. At the same instant they felt the earth quiver, and were blown down by a mighty rush of wind. The underlookers said they went down the pit as usual about 5 o'clock, and the firemen who examined the works reported all their districts to be in a satisfactory state.

A careful estimate of the number of lives lost puts it at 170. The number of bodies recovered is 22; one of the injured died soon after being brought out of the mine, and 147 men and boys are missing. A subscription has been opened for the relief of the sufferers, and it has been headed with 500*l.* by Mr. Andrew Knowles on behalf of himself and his cousins, who are shareholders in the company.

SHOT-FIRING IN MINES.

PROSECUTION BY THE CROWN.

An important case came on at the Gateshead County Police-court on Friday, proceedings having been taken by the Home Office against the manager of Usworth Colliery for illegal shot-firing on the 2nd March last, the day on which the disastrous explosion, by which 42 lives were lost, occurred at that colliery. The summons charged Mr. A. S. Palmer, as agent of the Usworth Colliery, with violating the provisions of the Mines Regulation Act. The case for the prosecution was that the shot-firing was illegal, and would have been so if there had not been any explosion. It took place on the 2nd March, and there would not, he supposed, be any qustion as to the shot being fired on that night. Gas had been seen on several occasions within three months before. The first occasion was on the 10th December and the last February 24, and between those dates there were something like 11 or 18 entries in the book of gas having been seen.

Mr. Cooper, for the defence, did not dispute that gas had been found, but it was not found within the conditions of the Act. He was prepared to prove that it was due to a temporary stoppage in the ordinary ventilating appliances, and was removed when the ventilation was put right, and that it was not any fresh issue of gas from the coal face, coming from the geological structure as an inherently gaseous property, before being mixed with ventilating air.

Henry Robinson, overman in the West Pit, and Heath Dobson, deputy-overman of the Narrow Board district, gave evidence. The latter stated gas was reported in James Carr's place on Dec. 23rd. He tested the gas with the lamp, and it gave a blue cast.

Henry Morland, deputy-overman, said that on the 28th January he reported having observed gas. He tested it with the lamp, and the result was a grey or brown cap on the flame. He did not remember saying at the inquest that it showed a blue cap. On the 3rd of February he found gas coming off the goaf in the same place. The place where he found the gas was 600 or 700 yards from the place where the shot was fired.

Mr. James Willis, Inspector of Mines, said so far as knew, no notice of making the mine into separate districts had been sent to him or his predecesor. A hissing noise denoted there was gas present. If the ventilation was active, the gas would not show a blue flame. Sometimes it could be judged by the smell. So far as gas was concerned, Brown's shot place was one that a prudent colliery manager was justified in selecting. Some time previous to the firing of the shot, owing to a complaint, he or his Sub-Inspector was asked to inspect a place in the "narrow board," with reference to the firing of the shot. After investigating the circumstances, they found no reasonable objections against it, but he thought that the owners agreed that no more shots should be fired there. Shot-firing in the place where it was should have been carefully considered. He did not mean to say it was not carefully considered. Blue cap having been seen within three months, careful investigation should have been made.

Mr. Lindsay Wood said he was a mining engineer and colliery-owner, Chairman of the Durham Coalowners' Association, ex-President of the Mining Association of Great Britain, and one of the members of the Royal Commission at present sitting on accidents in mines. In reply to Mr. Cooper, he gave his version of the meaning of the rules in reference to the testing of gas "issuing" from the coal, stating that he did not think the part on which the prosecution relied applied where the gas only issued slowly.

Mr. John Daglish, President of the North of England Institute of Mining Engineers, said he agreed with Mr. Wood's evidence as to the construction of the Act.

The case was then adjourned, *sine die*, both parties having intimated that there would be an appeal against the decision. It was arranged that a case should be stated upon the evidence, that the Court of Queen's Bench should be asked to give a legal construction of the rules, and that the justices should afterwards convict or dismiss accordingly.

From Mr. JOHN B. REYNOLDS.—The markets for public securities have again relapsed into a state of great quietude, and the animation which appeared a short time since gives no immediate promise of return. One or two speculative securities have been operated upon, and a show of activity has been made, but it may be doubted, judging from past experience, whether such activity has ever had any real foundation or not. The fact is mining is so highly speculative that it is almost impossible to anticipate the future with any degree of certainty, however good the property may be, and this fact, which is admitted by all respectable and responsible individuals, should cause speculators especially to be extremely careful as to the line of action they adopt. Money is a precious commodity, notwithstanding that it is very cheap just now, and those investors and speculators who wish to increase the little they have, or get for it a fair percentage with safety, cannot, we think, be too cautious as to the influences which induce them to part with it. We know of no better study for investors in mines than the old numbers of the *Mining Journal*. Let readers take a little time to study its pages, and they will rise from such study with very mingled feelings. Comparing the old numbers with the recent issues we arrive at the conclusion that sufficient care is not taken by writers as to what appears in print under their names. We are glad that the old *Mining Journals* have been preserved for so long back, and our reasons for being pleased will not be far to seek. Whilst freely writing this, and without the slightest reservation, we must admit that mining is an interesting and in many cases a profitable field for straightforward and honourable speculator, but we are bound on the other hand to question the prudence of those who put it forward as a thoroughly safe investment for capital. To mining, as it appears to us the word "safety" does not apply. If an investor goes in for a great gain he must in the nature of things run a great risk. That many men are more than justified in running the risk there can be no doubt, and that many prudent men who have gained disinterested and reliable information have run the risk with considerable advantage to themselves will not be denied. The history of many properties which we might mention points to this as the only conclusion at which we can arrive. We notice with regret, however, that at a time when mining promises to assert its ascendancy in the mind of the British capitalist, many attempts are made to raise one property in the estimation of the public at the expense of another. The "trick" has not even the merit of originality; it is as old almost as mining itself. It discloses a weakness on the part of operators which gives ample evidence of both intention and design, and should be sufficient to open the eyes of those who are being practised upon.

A BIG BLAST.—Last Saturday at the works of the Violeta Gold Placer, in the north-west of Spain, a huge rock of granite weighing between 300 and 400 tons was removed at one blast from the side of the deep gorge through which the river passes and deposited in the bed of the river, so as to form a dam to divert the water into the line of 20-in. iron tubing that is to convey the water on to the company's works. This extensive blasting operation, skilfully planned by Mr. Nancarrow, the engineer in charge, has obviated the necessity for some costly engineering work.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, has been:—Bombay (Limited), 6⅝; ditto, New, 5¾; British Gas Light (Limited), 42¼ to 43; Buenos Ayres New (Limited), 13⅜; ditto, Six per Cent. Debenture, 1896, 108⅜ to 109; Commercial Consolidated, 263 to 263½; Continental Union (Limited) Original, 40; Gas Light and Coke A Ordinary, 235 to 237; ditto, C, D, E, Ten per Cent. Preference, 239 to 242½; ditto H, Seven per Cent. Maximum, 155½; ditto Four per Cent. Debenture Stock, 107 to 108; Imperial Continental, 208½ to 210; Metropolitan of Melbourne, Five per Cent. Debenture, 1908-10, 106¾ to 107½; Para (Limited), 4¾; Rio de Janeiro (Limited) 2⅞ to 24; South Metropolitan, A, 275 to 275¾; ditto, B, 230 to 232½; ditto, C, 229. Gas stocks quiet, and little doing.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance British and Foreign, 34¾ to 35; City of London Fire (Limited), 1⅛ to ⅜; Clerical, Medical, and General Life, 51; Commercial Union, 16⅛; Employers' Liability Assurance Corporation (Limited), 1⅝; Fire Insurance Association (Limited), ⅝; Law Fire, 14⅛ to 15; Law Life, 110½; London, 46 to 46½; London and Provincial Marine (Limited), 4½; Marine (Limited), 29 to 29¼; North British and Mercantile, 28 to 29; Railway Passengers, 8⅝; Rock Life, 7⅛ to 7⅜; Royal Exchange, 401 to 410. Insurances little doing, most companies easier.

Provincial Stock and Share Markets.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine sharedealer, Redruth, writes under date June 18:—There is very little change to notice in prices in the share market this week. Dolcoaths have improved 20s., East Blue Hills 7s. 6d., and Blue Hills 5s. South Frances are a ¼ lower, and Wheal Grenville is also a ¼ lower. The tin standards were advanced 4s. on Monday. Following are prices:—Blue Hills, 17s. to 18s.; Carn Brea, 3⅞ to 3¾; Cook's Kitchen, 9 to 9¼; Dolcoath, 71 to 71¼; East Blue Hills, 30s. to 32s. 6d.; East Pool, 44½ to 44¾; Killifreth, 20s. to 21s.; New Cook's Kitchen, ½ to ⅝; New Kitty, ¾ to ⅞; Pedn-an-drea, ¼ to ½; South Condurrow, 7¾ to 8; South Crofty, 3¼ to 4; South Wheal Frances, 9 to 9¼; Tincroft, 7⅛ to 7⅜; West Basset, 2⅛ to 2⅜; West Frances, 8 to 8¼; West Kitty, 7⅛ to 7⅜; West Peevor, ⅛ to ⅜; West Wheal Seton, 5⅛ to 5¼; Wheal Agar, 18¼ to 18¾; Wheal Basset, 9⅜ to 9½; Wheal Grenville, 10⅜ to 10⅝; Wheal Peevor, ⅜ to ⅝; Wheal Kitty (St. Agnes), ⅛ to ¾.

—Mr. M. W. BAWDEN, Liskeard, writes under date June 18:—The mining market is moderately active with a fair demand for several of the low priced in mine shares on improved prospects. Closing quotations subjoined:—Anderton United, ⅛ to ¼; Bedford United, ⅛ to ⅜; Blue Hills, 1 to 1¼; Carn Brea 3¾ to 4; Cook's Kitchen, 9 to 9¼; Dolcoath, 70 to 70½; Devon Consols, 2⅛ to 2¼; East Blue Hills, 1½ to 1⅝; East Caradon, 1s. to 1s. 6d.; East Pool, 43½ to 44; Glasgow Caradon, ⅛ to ¼; Gunnislake (Clitters), ¼ to ⅜; Killifreth, 18s. to 19s.; Marke Valley, 5s. to 6s.; New South Caradon, 1s. to 1s. 6d.; Pedn-an-drea United, ¾ to ⅞; Phœnix United Mines, 1⅛ to 1⅜; Prince of Wales, 7s. to 8s.; South Caradon, ¼ to ½; South Condurrow, 7 to 7¼; South Crofty, 4¾ to 5; South Frances, 9¼ to 9½; Tincroft, 7 to 7⅛; Trevaunance Consols, 1⅞ to 2; West Basset, 2½ to 2⅝; West Caradon, 1s. to 1s. 6d.; West Frances, 8 to 8¼; West Kitty, 7 to 7¼; West Phœnix, 1s. to 1s. 6d.; West Seton, 5 to 5¼; Wheal Agar, 18 to 18¼; Wheal Basset, 9 to 9¼; Wheal Crebor, 1½ to 1¾; Wheal Grenville, 10¼ to 10½; Wheal Kitty, ⅝ to ¾.

—Messrs. ABBOTT and WICKETT, stock and sharebrokers, Redruth, write under date June 18: The price of shares has not responded to the advance in the price of cash tin, and not very much business has been done this week. There has been some enquiry for Blue Hills, East Blue Hills, and Wheal Kittys at higher rates. Closing quotations herewith:—Blue Hills, ¾ to 1; Carn Brea, 3½ to 4; Cook's Kitchen, 9 to 9¼; Dolcoath, 70¼ to 70¾; East Blue Hills, 1½ to 1⅝; East Pool, 44 to 45; Killifreth, 20s. to 21s.; South Condurrow, 7⅛ to 7¾; South Crofty, 3⅛ to 4; South Frances, 9 to 9⅛; Tincroft, 7⅛ to 7½; West Basset, 2½ to 3; West Kitty, 7 to 7⅛; West Polbreen, ½ to ¾; West Frances, 8 to 8¼; West Seton, 5 to 5⅛; Wheal Agar, 18½ to 18¾; Wheal Basset, 9¼ to 9⅜; Wheal Grenville 10¾ to 10¾; Wheal Kitty, ⅞ to ⅞; Wheal Peevor, ½ to ¾. Tin, 95.

—Mr. JOHN CARTER, mine sharedealer, Camborne, writes under date June 18: On Monday last the tin standards were advanced 4s., but there is very little change in prices of our leading tin mines. Dolcoaths, East Pools, Blue Hills, and East Blue Hills have slightly advanced. Other shares remain quiet, and close as follows:—Blue Hills, 16s. to 18s.; Carn Brea, 3⅝ to 3¾; Cook's Kitchen, 9 to 9½; Dolcoath, 71 to 71½; East Blue Hills, 1½ to 1¾; East Pool, 44⅛ to 45; Killifreth, 20s. to 22; New Cook's Kitchen, ⅜ to ⅝; New Kitty, ¾ to ⅞; South Condurrow, 7½ to 8; South Crofty, 3¾ to 4; South Frances, 9¼ to 9½; Tincroft, 7¼ to 7½; West Basset, 2½ to 2⅝; West Frances, 7¾ to 8¼; West Kitty, 7¼ to 7½; West Peevor, ¼ to ⅜; West Seton, 5¼ to 5¼; Wheal Agar, 18¼ to 18½; Wheal Basset, 9¼ to 9½; Wheal Grenville, 10¼ to 10½; Wheal Kitty, ⅝ to ¾; Wheal Peevor, ⅜ to ½. One o'clock, tin 95.

MANCHESTER.—Messrs. JOSEPH R. and W. P. BAINES, stock and share brokers, Queen's Chambers, Market-street, write under date June 18th:—The past week has furnished very few matters of interest to report upon. In the home railway market some few variations in quotations have been witnessed, but with one or two exceptions the movements are not particularly noteworthy. Money continues abundant and cheap, and profitable investment of capital a difficult undertaking, as witness the large surplus of applications for new Government loans over amount to be allotted. As we commented upon some little time since, capitalists are by no means content with the small return which the best esteemed securities offer, and have been, and are still looking further afield for channels of investment, consequently accepting securities, which, though no doubt sound and safe enough, would up to a little while back have been refused by such investors. The consequence is that some of the bonds in this category having come into increased demand have necessarily been forced up in price, and if these were further partially neglected stocks to change into the change from prices at which they have been held might be a reasonable one. The political aspect of affairs has been shrouded in a deal of mystery and uncertainty recently, and this has been reflected in the market. As, however, there appears a likelihood of a Government being formed which will, no doubt, be allowed to carry on the conduct of national affairs for some time, at least some little of this uncertainty is done away with, and Consols have advanced fractionally. Colonial Government bonds are generally better. Foreign bonds on the whole are not much changed. Egyptians of all issues are a trifle better, as also, though in a lesser degree, are Italians. Argentine Hard Dollar Bonds are 4 per cent. higher. On the other hand, Mexican Three per Cent. (1851), and Russian Five per Cent. (1873) are ½ each lower. Home Corporation stocks and debentures are steady with a rise of ¼ in Liverpool 3½ per Cent. as the only quotable change.

BANKS.—Small business doing, and although there are a few partial changes of quotations, the only actual alteration is a rise of ½ to ⅝ in Union of Manchester.

INSURANCE are moderately brisk, and quotations show a tolerably even balance of change.

COAL, IRON, &C., AND MINING.—More doing than of late, but majority of change in figures is again adverse. Bolckows show further decline, the fully-paid and 12l. paid issues both being ¾ to 1 lower. A. Knowles and Sons, Ebbw Vales, and Pelsalls, and some others are also lower, against which Cammell's Preference are 1, Great Laxey Lead ⅛, Rio Tinto ½, and Palmer's Shipbuilding A, ¼ better. Cotton spinning shares show no improvement, and none is likely to appear till the margin of profit is better.

TELEGRAPHS AND TELEPHONES, latter rather stronger; former quiet, and change in quotations irregular.

MISCELLANEOUS.—Little movement to record, moderate business passing in the aggregate, but consisting chiefly of isolated transactions. Rochdale Canal 1 higher. Suez Canal ¼ lower. Gas Light and Coke, A, 1 better again. Nothing further of importance.

RAILWAYS.—Money continues abundant, as applications for new loans show conclusively; but this does not help rails much, as the majority of the movements in prices are adverse, though not decidedly. Metropolitans are an exception, have risen sharply on report of intended sale of surplus land, and investment of proceeds in their own stock, and though below the best of the week, they show a rise since Thursday last of 3½ per cent. The Grand Trunk of Canada traffic is again a big decrease—total: 11,061l. Notwithstanding this, however, prices are very little altered. Americans, though prices are the turn better, have nothing in trade of their country at present visible to warrant an improvement. Mexican rails, with a traffic increase of 3000l., quote a little higher.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, stockbroker and ironbroker (June 18), writes:—During the past week there has been very little business doing, owing to the change in the Ministry, but the Money Market and the weather should both help prices.

In shares of coal, iron, and steel companies prices are generally lower, owing to the unfavourable outlook of the iron trade. It has now been bad for such a length of time that a crisis cannot be far off, which might lead to a reduction of make, and thus improve matters. Bolckow Vaughans have declined to 14⅝. Ebbw Vale, 76s. 3d.; Marbella, 43s. to 44s.; West Cumberland, 71s. 3d. Wetley Colliery shares and debentures offered.

In shares of foreign copper concerns prices are steady. Tharsis have been sold from 97s. 6d. to 100s., and warrants at 100s. 6d. Mason and Barry and Rio Tinto look rather better.

In shares of home mines prices are inclined to improve owing to the upward tendency of the copper and tin markets. East Blue Hills continue in demand, as the mine is looking well. The last report from the York and Lancaster Mines shows they are now in a position to yield calamine and lead, as also barytes. The machinery for preparing and dressing the same is finished, so that returns should soon be announced. Devon Consols are at 69s. to 70s.; Ectons, 18s. 9d. to 21s. 3d.; East Blue Hills, 32s. 6d. to 35s.; Frongoch, 2s. 6d. to 5s.; Goginan, 1s. 3d.; Killifreth, 18s. to 20s.; New Cook's Kitchen, 11s.; New West Caradon, 2s. to 3s.; Old Shepherds, 4s. to 5s.; Parys Copper, 5d.; Prince of Wales, 7s. 6d. to 8s. 9d.; Red Rock, 1s. 6d.; West Devon Consols, 1s. 6d.; and Wheal Castle, 2s.

In shares of gold and silver mines there has not been much business doing. Montanas have improved from 34s. to 35s. 9d. Balkis are at 1s. 3d. to 1s. 9d. Ooregums should be worth attention at 2s. to 3s., as the number of preference shares applied for has been in excess of the minimum number required. Kohinoors firmer at 2s. to 3s.; the manager reports that the ore in the bottom of the 660 ft. drift east is turning out splendidly. The winze leading down from the 600 to 660 is producing a fine run of ore. It now seems that their Champion Mine is about to turn out the success it was predicted it would. Colombian Hydraulic, 9s. to 10s.; Graskop No. 3, 24s. to 26s.; Indian Consolidated, 3s. to 4s.; Kimberley Central Diamond, 55s. to 65s.; Mysore Reefs, 1s. 3d.; Oscars, 11s. 3d. to 12s. 6d.; Schwab's Gulley, 57s. 6d. to 62s 6d. and West Callao, 2s. 3d.

In shares of miscellaneous companies there is no particular alteration to notice. Lanark Oils have improved to 49s., but Midlothians have declined to 38s. House Mines Trust, 12s. 6d. to 13s. 9d. Lawes' Chemicals, 4½ to 4¾, and Nobel's Explosives are about 16¾.

EDINBURGH.—Messrs. THOS. MILLER and SONS, stock and share brokers, Princes-street, write under date June 17:—The stock markets have been very idle during the past week. Caledonian railway stock has improved ⅜, Great Eastern 2s. 6d., Brighton Deferred 1⅛, Metropolitan 2¼, South Eastern Deferred 1. North Eastern has receded 2. The allotment letters of North Eastern New stock are selling at about 14 premium on the price of issue, and those of the Midland Company at about 6¾ premium. Preference and Debenture stocks have maintained the late rise in prices, and in a few instances are slightly higher. Canadians have been very weak. Americans have shown strength. In banks, Bank of Scotland has risen 20s., and British Linen 20s. Caledonians have receded 1. North British and Mercantile Insurance shares have advanced 12s. 6d., and Scottish Union A, 1s. Australasian Mortgage and Agency shares have advanced 1s., Northern Investment of New Zealand 3d., Otago and Southland 3d., Scottish American Investment 3s., Scottish American Mortgage 6d., Scottish and New Zealand 1s. South African Loan have receded 3s. to 5s. In Land and Cattle shares, Arkansas Valley have advanced 4s. to 90s.; Prairie Cattle, 5s. to 5½; Swan, 1s. 3d. to 67s. 3d. Canada North-West Land have receded 2s. to 8l. 15s.; Missouri Land and Line, 5s. to 2l. 5s. In mining shares, Rio Tinto have risen 8s. 9d. to 10½. Marbella have declined 5s. 6d. to 43s. 6d, Huntington, 4s. to 10s. In oil shares, Burntisland have declined 3⅛ to 16⅜. Midlothian 6s. to 38s. West Field, 1s. to 2l. 12s. Assets shares have risen 1s. 3d. to 7l. 1s. 3d. Distillers have receded ¼ to 15⅞. Linlithgow oil shares have been dealt in at 12s. 6d. premium. Arizona Trust and Mortgage, 3l. paid, have changed hands at 32s.

WATSON BROTHERS MINING CIRCULAR.

WATSON BROTHERS,
MINEOWNERS, STOCK AND SHARE DEALERS, &c.
1, ST MICHAEL'S ALLEY, CORNHILL, LONDON.

Before the days of telegrams, or even of railways, we knew a miller in a large way of business in a country village. He would drive to the market town, 12 miles away, every market day, and if the price of wheat rose even 1s. a quarter, he would soon be seen driving home early, and at a good pace, to his mill, where he put up the price of flour at once. But if it happened that on a market day wheat dropped in price, he drove home very leisurely, and took a week's consideration before dropping the price of flour! Now, the tin smelters of Cornwall are constantly reminding us of this old miller; for their ways are the same, only on a larger scale and of greater importance. Tin in London may go on rising day after day before they will give the miner a sixpence more for his ores, though so much depends on a fair price. But let tin show even signs of drooping in the speculative London market, and they at once put down the standards, which regulates the price to be paid the miner for his ores. The week before last tin, which had gradually been rising for some time, reached 90, and the smelters very tardily at 92 put up the standards and rejoiced the hearts of the miners. On Monday the 8th, through speculation, of course, tin dropped in London to 89, and the standards on the same day were put down 2l. By Thursday following tin had again risen to 93, or higher than ever, but there was no sign from the smelters during the week; and not till Monday the 15th, when tin reached 97, they put up the standards 4l., or a rise of 2l. on the standards that ruled up to the 8th. Thus every mine that had to sell tin between the 8th and the 15th had to take 2l. per ton less for their ores.

Through an error last week, East Blue Hills shares, which according to the City Article, left off 30s. to 35s. buyers, were quoted in the Share List 1⅛ to 1¼. Metal and Flow, also by mistake, were quoted 10s. to 15s.

We are almost daily offered mines and sites in different parts of the world, some accompanied by long reports which we are asked to read. This, however, we cannot do, nor reply to the number of letters we receive on the subject. We do not bring out limited companies.

The present system of sixpenny stamps for Cost-book transfers came into vogue in 1860. The expense of transferring shares in limited companies is 10s. per cent. as it was formerly in mines under the old system. We then got up an agitation, and had the duty reduced on all Cost-book mines to sixpence. So that, in fact, 1000l. worth of shares can be transferred on a sixpenny stamp. This has been a great boon to Cornish mining. There was a fear at one time that the sixpence would be charged on each share; and we called the attention of the Chancellor of the Exchequer to the matter, and urged that it should only be on the "Cost-book notice," which in reality is a request to the purser of the mines to enter the purchaser's name on the Cost-book for the number of shares mentioned in it. We have now before us the reply, which is dated 6th March, 1860 (or more than 25 years ago), from the Inland Revenue Office—

"Sir,—With reference to your letter dated the 22nd ult., addressed to the Chancellor of the Exchequer, on the subject of the proposed stamp duty upon 'Cost-book Notices,' I am directed to acquaint you that it is not intended that the stamp duty should be made payable in respect of every share, but only on the notice.—I am, Sir, your obedient servant,

(Signed) T. SARGENT."

"J. Y. Watson, Esq., F.G.S."

North Blue Hills, adjoining East Blue Hills to the north, has been in abeyance for some time; but the lease is still held by the company, and any day, now that East Blue Hills is turning out so well, North Blue Hills may be revived as a good spec. There is no debt on the concern.

It is very well known that the values put upon the ends of a mine in weekly reports are for the most part conjectural—based upon appearances and the judgment of the agents without actual test—and, therefore, not always correct, and seldom err on the wrong side. To test the actual value of the two ends at East Blue Hills, we asked the agent to test, by assay, each end, and let us know their actual results. He writes as follows:—First, we hauled up some 5 or 6 tons mixed, equal quantities from each end, and this produced 2 qrs. 21 lbs. of tin per ton. Then we get a smaller parcel from each end separately—that from the east end produced 2 qrs. of tin per ton, and that from the west end 3 qrs. 16 lbs. per ton—thus the average of the two latter being very nearly that of the former, we may take it as practically correct, and assuming the cubic fathom to contain 16 tons, we arrive at the value of the end as being 20l. per fathom, and that of the west end 35l. per cubic fathom (or 70l. per fathom for its width) Very few reports, we think, would stand this test and come out so satisfactorily.

A gentleman has had East Blue Hills inspected this week, and has sent for our perusal his agent's report. He values the ends about the same as the resident agent, and says the sinking the shaft has just commenced for another level; it is sinking in the north part of the lode, and worth 20l. to 25l. per fathom. He concludes his report by saying, "You have, to all appearance, a splendid property, and I do not hesitate to recommend it as a highly promising investment."

Our correspondent will see there is a further improvement under the shale at D'Eresby, where the agent writes, "It looks as though it had touched a new bed of lead ground." We hope it will not be long before we have to announce a good discovery here, and the fully paid-up shares of 1l. each certainly should not be sold but bought. There are only 12,000 shares, and a reserve capital of 3600l., in 6000 of them. D'Eresby samples 15 tons of lead ore this week, and since the above remarks were written a further improvement has taken place in the mine. The agent writes on the 18th.—"We had another sinking hole to-day still deeper, and threw up some splendid lead. I have not seen this part of the lode look so well before since we cut into the Silver Chamber at No. 5. I have been accused of being too sanguine as to the value of the mine in depth, but whether the accusation be right or wrong I am more sanguine on that point to-day than I have ever been before."

The mineral agent of the Duke of Leeds has visited Metal and Flow this week, and very much liked the look of the stuff from and around the Metal lode. Two more pulverisers will go to work with the engine at the end of the month, and the number will be increased as fast as possible, so that we hope before long to get up to 10 tons of tin a month from the Flow, which would pay the costs of sinking on the Metal lode, and leave a good monthly profit besides. The more pulverisers we can get up the larger the profit, but machinery takes time to erect.

THE YORKSHIRE COAL TRADE, AND THE LATE STRIKE.

The effect of the recent strike in the coal trade of South and West Yorkshire is demonstrated in the falling off in the quantity of steam coal sent to Hull during the time the pits were closed. The quantity of coal sent last month from the Yorkshire pits to Hull was only 63,088 tons, against 115,672 tons in the corresponding month of last year, or a falling off to the extent of 52,584 tons. The decline, as compared with the month of May, 1883, was 52,136 tons. In the past five months there were sent 429,664 tons, against 506,192 tons last year, or a falling off to the extent of 76,528. The exports also show a marked decline, only 23,633 tons leaving the port last month, against 69,331 tons in the corresponding period of 1884. A large number of ships which usually load at Hull for foreign ports have, during the last two months, sailed up to Newcastle-on-Tyne, and taken the North Country coal to fulfil their orders. It is feared that there will be little improvement in the export coal trade for some considerable time to come, the heavy contracts having now been mainly placed. Now that most of the pits have gone to work the trade is in even a worse condition, the enquiry for house coal being even lighter than ever. Prices have likewise suffered, the present quotations for best house coal ranging from 8s. upwards at the pit; best softs being quoted at the pits at from 6s. to 6s. 6d. also show a reduction. During the month of May the tonnage of coal sent to London by rail was nearly 60,000 tons less than during the corresponding period of last year. The steam coal trade is likewise in a depressed condition, and slacks are in but poor request. In the iron trade the complaints concerning keen competition are again being made, and the recent hot weather has told somewhat against production in many departments. The rail mills are kept steadily going, but seeing that heavy sections are now being sent away for from 4l. 12s. 6d. to 4l. 15s. per ton, the cost of production must be very closely watched to make the realisation of a profit. At most of the foundries in the district trade is far from being good, the run just now being mainly for cheap, and consequently only imperfectly finished work. Makers of railway material are no busier, whilst as regards the various other branches of the iron trade carried on in this locality there remain considerable room for improvement. A tolerable trade continues to be done at the principal steelworks, the enquiry for billets, both for special and ordinary purposes, having somewhat improved.

COAL-GETTING MACHINERY.

For the safe and economical working of coal, mechanical appliances have been introduced during the last few years with more or less success. Yet they have not been so generally adopted as could be desired. But improvements have been made in the construction of them of late that leaves but little to be desired. Coal is not only cut in the solid by machinery, but where it is holed by hand it can now be brought down by water-power, so avoiding the risk and danger arising from the use of powder or other explosive. The most recent invention in this direction is the "hydraulic coal-getter," as it is termed, and has just been introduced by Messrs. ROWE and HUDSON, who are connected with engine-works in the North of England. Mechanical coal-cutters, it may be said, are now working in coal mines in Yorkshire, Lancashire, the North of England, and in Scotland. The idea of getting coal by machinery, although only introduced into our mines during the last twenty years, or perhaps a little more, is really an old one, for so far back as 1760 an engineer named Menzies took out a patent for a pick machine, in all probability something like what is now working at some pits near Leeds, and patented by the Messrs. Firth. There is now a single and a double-pick machine, both being worked by compressed air. The latter power is that which is adopted in connection with the machines now working, it having the collateral advantage claimed for it of improving the ventilation at the faces, as the exhaust air from the machines delivers a constant supply of fresh air in the course of working. On this point Mr. W. Firth some time since stated that when the pick was working at the rate of about 80 blows a minute, and with the air at a pressure of 45 lbs. to the square inch, the reduction of temperature in the neighbourhood of the machine at the working faces was about 4 deg. Fahr. of from about 56 to 52 deg. The pick-machine of the Messrs. Firth has been in successful operation for several years at West Ardsley, and has holed to a depth of 3 ft. 6 in. a length of from 80 to 90 yards in an ordinary eight hours' shift. The waste or small coal produced in a 5 ft. seam has only averaged some 4 or 5 per cent., whilst that by hand-cutting will amount to from 12 to 15 per cent. In addition to this there is no danger from falls, for many fatalities occur from the coal falling upon the men whilst they are engaged in holing. In addition to the pick machines, there are the rotary cutters, patented by F. Hurd, Gillott, and Copley, Wm. Stanley and Rigg, Meiklejohn, and others. Of these the machine of Gillott and Copley, now being made by Messrs. Gillott and Sons, at Barnsley, have attained considerable success, and are to be found in daily operation at several of the largest mines in the Midland field, at one of them continously for upwards of 13 years. Some of the machines are only about 20 in. in height, and at one trial one of them cut in five days 495 yards to a depth of 3 ft. 4 in., so that in Thin seams the mechanical getter would be equally as valuable as in thicker ones. The machines are now principally made of steel and consist of a frame, and in the framework there are engines supplied with compressed air from a pipe, exhausting direct against the face of the working, the exhaust air, as previously stated, aiding the ventilation, and so causing the working place to be agreeably cool. As is the case in nearly all kinds of coal-cutting machines, there is a much larger percentage of round coal produced than is the case by hand, and this is a matter of great importance to the mineowner, as it is really one of profit against actual loss. In addition to the machines noticed, there are others which have been tried, some of them being now worked. Amongst these is a horizontal traversing slotting machine, which moved along the face, and cut a slot or groove, along the bottom of a seam of coal. This machine was patented by Mr. Donisthorpe, of Leeds, but not much has been heard of it. The Winstanley and Rigg machine is somewhat similar to that of Gillott and Sons, whilst the cutters in Baird's machine are arranged upon a travelling pitch chain. With respect to the hydraulic coal getter, which has just been brought out, it appears to be excellently well adapted for bringing down coal in a large and marketable state, without any risk to those engaged in the mine. It has been fully tested at several mines in the North of England, and so satisfactory have they turned out that we understand the new "getter" will have a permanent position at several places, and come into pretty general use in different parts of the country. The invention is not only simple, but easy of application, water being the power used in connection with the machine, whilst there is no preliminary education of any importance required in the working of it. The machine itself may be said to consist of a wedge bar placed inside of two taper shells, and so arranged as to be connected with a cylinder fitted in the usual way for the application of water-pressure.

SOUTH FRANCES.

On Thursday a meeting of the shareholders in South Frances was held. Mr. CORNELIUS BAWDEN (the purser) presided.

The labour costs for sixteen weeks were 3793*l.* 2s., merchants' bills 2491*l.* 3s., lord's dues at 1-30th dues 231*l.* 15s. The total costs were 6524*l.* 19s. The tin sold amounted to 146 tons 14 cwts., realising 6889*l.* 14s.; extra carriage of tin, 25*l.* 5s.; discounts, 61*l.* Total credits were 6977*l.* 3s., this leaving a profit of 452*l.*, and giving a credit balance in favour of the mine of 155*l.* 10s. The tin, explained the Chairman, had sold from 44*l.* per ton in the beginning of the sixteen weeks to 57*l.* with the last parcel. The account, he added, was satisfactory so far, as they had made a profit; but he was sorry to say that the profit was not a divisable one. A dividend would simply mean pence. They had had a rise of something like 7*l.* 10s. per ton since last time, but yet to-day the average was 4*l.* 13s. per ton less than last time. Had they this 7*l.* 10s. for the whole sixteen weeks the profit would have been some 700*l.* more than it was. (Hear, hear.)

The reports of the agents (Captains Charles Craze, John Opie, and Richard Williams) stated Pascoe's shaft is sunk 9½ fathoms below the 236 fm. level. The lode here for the last 3 or 4 ft. sunk has not been quite so good as it was above, a floor of spar having come across it. However, we are pleased to say that there is a better appearance in the present bottom, and we think it will soon resume its former value, especially as we have seen similar changes here before. At present it is worth 30*l.* per fathom. In about four weeks from this time we hope to get deep enough to commence driving east and west in the 247, when we may expect to have good profitable ground in both ends. Especially do we expect to have a good lode in the west end, as we have commenced to sink a winze 10 fathoms west of shaft, in the 236, where the lode is large, and worth 40*l.* per fathom for 12 ft. long. The 236 is driven 15 fathoms east of Pascoe's, and worth 8*l.* per fathom, and we expect it to improve, as we had a rich lode in the 226 some few fathoms before this point. There is a rise going up in the back of this level, where the lode is worth 10*l.* per fm. We hope to hole this in about a month, when a good piece will be laid open for stoping. The 236 has been driven west of shaft 24 fathoms. The lode in the end is worth 20*l.* per fathom. Just behind the end a rise is being put up, where the lode is worth 30*l.* per fathom for the length, 9 ft. A winze is coming down on this point from the 226, in which the lode is worth, for 12 ft., 25*l.* per fathom. No. 2 winze, in the bottom of the 226, 15 fathoms west of No. 1, is worth 45*l.* per fathom for the length, 12 ft. One stope in the back of the 236 is worth 20*l.* per fathom. No. 1 stope in the back of the 226 west is of the value of 15*l.* per fathom. No. 2 stope is of the value of 20*l.* per fathom, Daubuz's shaft has been sunk 6 fms. 3 ft. since the last meeting, and is now down 16 fms. 3 ft. below the 58 fathom level. At the 70 fathom level we have cut north and found the main part of the lode. We expect the lode will further improve in the westerly direction, where we have 130 fathoms to reach the great cross-course, and parallel with the ground where West Frances has made all its returns of tin for the last 20 years. This we consider very important, and especially so as we expect to get down and strike this lode at the 85, in about six months from this date. It will be seen that the bottom of the mine continues to open out well. The pumping-engine, pitwork, and other machinery throughout the mine had continued to work well, and, with the present price of tin, we hope to do better in the coming 16 weeks.

Capt. CHARLES CRAZE, in alluding in detail to the mine, said the meeting would observe that the shaft had not been valued so high as some month or two since. They had had changes in the lode there, and he could only say, from the appearance of the lode on the previous day, he was very pleased and satisfied in his own mind. He did not think they would be long before the lode would resume its good position. About 10 or 11 fms. to the west of this they were sinking a winze so as to get down—which he thought they would be able to do in a month—working expeditiously by the time the end got under, so that they might lay open this very important piece of stoping ground. The lode runs from 10 to 12 ft. wide, strong and masterly. They had gone through a very good piece of ground in the 236, and in the 236 they had a winze going down in as fine a lode as he had ever seen in South Frances. They had really a very capital point there. They had been enabled to send up from 12 cwts. to 15 cwts. of tin from Daubuz's part of the mine, and they hoped, from this time to go on making some little returns, and he had no doubt that those returns would regularly improve. On the whole, added Capt. Craze, I may say I have never seen South Frances looking better. The price of tin is very encouraging, the present price, as the Chairman has said, had it been ruling for the 16 weeks would have given us some 700*l.* more to-day. I do not see how our costs are to increase. I know they cannot if we work the mine as we ought. But the costs cannot fall off, and with the present price of tin we should show a better state of things at the end of the next 16 weeks than we show to-day. (Applause.) The returns of tin, as you will see, are hardly up to what Mr. Mayne pumped out of me last time. We hoped to be able to return 10 tons of tin a week, as we had been returning this quantity for the three weeks prior to the meeting. But in about a fortnight after the last meeting our two bottom points—the 236 east and the 236 west—and the stopes behind the end as well, fell off a little, so that month's tin decreased some 20 lbs. to the ton of stuff. We sent up quite as much stuff—rather more. So our returns were, for the middle four or six weeks, less than we had expected. However, as I say, I see no reason why we should not keep up to quite the average of the past four months, and we shall try to do even a little better than that—do all we can to bring about the result we have been looking for in the shape of a little dividend. (Applause.)

Mr. WILLYAMS: I shall have much pleasure in moving the adoption of the report and accounts. I think I must say that I should like to have seen a greater, a larger profit, and am a little disappointed also; but at the same time when we look at and consider the price of tin for the whole of the time, surely we cannot complain, and although Capt. Craze has not quite kept up to 10 tons a week, yet I think he has been a little more cautious to-day. There is, I believe, every hope that his opinion will be borne out. We are still dependent on the price of tin. If we had only the average of to-day—51*l.* 12s. 6d.—they would have had 4*l.* 13s. per ton more. If we keep that price up there is every reason that we might be in a position to declare a dividend. I think that on the whole every thing is looking very satisfactory. As you know, we have laid out a very considerable sum of money in permanent work, and there is every ground for the belief that the merchants will not increase; but it is necessary that everything should be kept in perfect working order. I hope we shall never regret the money laid out, and the mine should now go on for years without more outlay. I think you will agree that the right course was adopted in proceeding to this heavy outlay. We have not allowed our accounts to go back; we have always faced our loss. I do not call it a loss, because I consider it permanent outlay of capital. Instead of finding ourselves by our arrangements in arrear, we find we have been able to pay our merchants, and take up discounts, and to-day we have a small profit. We have a healthy body of shareholders, as shown by the small arrears on the last call. I think, on the whole, we have a great many things to congratulate ourselves upon; and although I should have had liked to have seen the 700*l.* or 800*l.* which we should have had had tin been what it is to-day, yet I hope next time we shall see something of the sort.

Mr. JOHN MAYNE seconded, and the resolution was adopted.

Capt. CRAZE: The pitwork is answering to our entire satisfaction. I may say that when our engine used to be idle, and the water rising in the bottom of the shaft, for 50 hours, it is not idle one hour now. (Hear, hear). We have not anything more than the ordinary little lots you will find in every mine. We can cope with water very satisfactorily indeed; and in working the bottom of the mine we shall be able to show this month something like 10 ft. or 11 ft. in Pascoe's shaft, which must be considered very good sinking indeed. (Hear, hear.)

Capt. CHARLES CRAZE, in reply subsequently to the toast of "Success to the Mine," said he supposed it was owing to the repeated good wishes and prayers of the shareholders there from time to time during the past four years that they had been enabled to weather the storm—to get through their difficulties. (Hear, hear.) During the last four years they had a very hard and long pull, and he did not wish to go back over them. As far as the machinery was concerned those days were over for the next 20 years. They had now machinery completed, and working as satisfactorily as the machinery of any mine in the county. As regarded the mine they were never in a better position—(applause)—and seeing that this was the case, observing that the sun of prosperity appeared to be shining upon them in the way of the price of tin, he had no doubt there was a better, a brighter, and a more successful future before them in South Frances. (Applause.) And whatever profits they made in the future would be disposed of by the shareholders, not, as had been the case in the past, when they made 1000*l.* profit, the agents claiming it to meet the loss on the coming 16 weeks, because of defective machinery. With regard to the western part of the mine, they as agents were greatly encouraged at their prospects there. Since the last meeting they had cut into the main part of the lode. In driving west it was opening out a very kindly lode indeed. The parcel of work which they dressed—the lode was 2½ ft. to 3 ft. wide—had made a produce of 80 lbs. to the 1 ton of stuff. That might be considered very good, seeing it was a soft lode, friable in its character, easily worked underground, and easily returned when it came to the surface.

Mr. JOHN MAYNE, replying for the committee, said he had that week met a gentleman who said he was prepared to find 23,000*l.* for the western part of their ground, but he replied he did not think they would sell. (Hear, hear.) He hoped with their prospects and the advance in tin that they would show a good profit next time.

The CHAIRMAN remarked that in the western part they had a mine in itself.

Capt. NANCE also spoke highly of the western part.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 15	Foxdale	103	£ 9 5 0	Panther Lead Co.
16	Central Foxdale	35	11 18 6	Walker, Parker, & Co.
	Lisburne	40	8 13 6	Panther Lead Co.
	Cwmystwyth	15	6 13 0	ditto
	East Darren	20	10 10 0	ditto
18	Standard	16	7 1 0	Walker, Parker, & Co.
	Great Holway	33	9 5 0	ditto

THE INVENTORIES EXHIBITION.

Stand 165.—Stephen Humble, 5, Westminster Chambers, Victoria-street, London, S.W., exhibit (1) King and Humble's Patent Safety Detaching Hook, with automatic lowering gear, for the prevention of overwinding of cages at mines.—2. Safety Cage, to suspend in shaft in case of fracture of winding-rope.—3. Humble and Miller's Patent Safety Miners' Lamp.—4. Humble's Patent Safety Blasting Plug, for mining, quarrying, and other blasting purposes, also applicable for the bursting of guns. A list of several hundred firms and companies are given who have adopted King and Humble's patent safety-hook in their mines, and many testimonials are given as to their value. From a report of the committee appointed by the South Staffordshire and East Worcestershire Institute of Mining Engineers on the merits of the various detaching hooks it says:—"Without attempting to fully describe the merits of those selected the committee have come to the conclusion that, considering all the circumstances affecting the use of the hooks, the order of merit is (first) King's." The recently-patented improvement to King's hook consists of an automatic lowering arrangement, by which in case of an overwind the hook with loaded cage can be instantly lowered the moment the winding-rope is brought back over the pulley, and attached by the shackle to the hook again, thus avoiding the danger and delay of having to take long and heavy lashing chains to the top of the head-frame to lower the cage by. This is a simple and effective improvement, tending to avoid delay and danger. It is said that over 3500 of these hooks are in use, and none have failed.

Stand 209.—Bohler Brothers, and Co., Saville-street, Sheffield. Utilisation of the spathic and brown ores of the Styrian Alps in the production of steel by the direct process, only charcoal being used for fuel. Also samples of Bessemer and Bessemer Martin steel from the same ores. Specimens of forging from extra tough cast-steel, forged discs for milling cutters, samples of tool steel broken when warm, fractured bars of chrome steel, fractured ingot of tungsten alloy, fractured bars of self-hardening steel, &c.

Stand 210.—Simon-Henry, 20, Mount-street, Manchester.—1. Coke ovens (Simon-Carvés' patent), with recuperation of heat, and recovery of tar, ammonia, benzol.—2. Samples of coke and residuals obtained by these ovens.—3. Drawings and plans of Simon-Carvés' plant of 100 coke ovens, producing annually 20,000 tons of coke, 1000 tons of sulphate of ammonia, 3000 tons of tar, and 300 tons of benzole.

Sir Henry Bessemer exhibits (on stand second from 210) a few of the original specimens of Bessemer steel and pure malleable iron dating back from June, 1856, to May, 1859, showing the resistance of this tough metal to fracture under the most severe binding strains or without concussions. E specimen is a hoop for strengthening guns 16 in. diameter made of Bessemer steel. In order to test its powers of yielding in form without fracture it was placed in edge under a powerful steam hammer when quite cold, and beaten flat without the slightest crack or fracture. This extremely tough steel is said to be 25 per cent. stronger than the best brands of iron, and is much less expensive.

Stand 167.—Glover and Hobson, engineer and millwrights, Albert Ironworks, St. James'-road, Old Kent-road, London, exhibit Hand Labour Rock and Coal Boring Machines.—1. Macdermott's patent coal perforator.—2. Macdermott and Glover's hand-labour rock perforator. The percussive perforator has been designed for boring in hard rock by the hand labour only of two men, and it drills in granite at the rate of 1½ to 2 in. per minute. It is portable, and can be set up and worked by two unskilled labourers. An ordinary smith can do all that is necessary to maintain the perforator in working order. All its parts are made specially strong to stand rough usage. The machine is simple in construction, and can be taken to pieces and set up again without difficulty, and well adapted for transport in rough countries. The same perforator can be worked either in quarry or tunnel frame. By the arrangement of cams (specially patented) four blows are given to each revolution of the fly-wheels; the work done is estimated 50 to 100 per cent. in excess of that accomplised by hand power machines using the ordinary cams. The patent feed is automatic, and will adjust itself to rocks, varying in degrees of hardness without requiring any attention; the patent rock and coal perforators can be worked by the labour of one man, and is said to give a result equal to six or eight men, giving these results in all the different rocks and strata connected with the coal measures. Holes can be bored either at the top, bottom, or any intermediate point of the working, and at any required angle, and are, therefore, useful for ripping down roof or forcing up floor, boring in advance of water, sinking shafts, driving levels, &c., the holes are uniform, and give the maximum effect of the explosives. There are four types of this machine, and by the use of type No. 2A holes can be drilled parallel and close to the roof or floor of a level. It is worked by link gearing, extremely light, and perfectly efficient, the chain on one side serving to drill the hole, that on the other to graduate the advance of the drill and also to withdraw the latter when the hole has been made. With the aid of this machine a hole can be put in within 1 in. or 2 in. of the roof or floor, while the labour is comparatively light; the man working the handle at the proper height for his arm, and the gearing being also so adjusted as to considerably reduce his labour. Its value for boring ahead for tapping water in old workings are demonstrated by testimony of Mr. Wm. Wardle, M.E., who bored a hole 15 yards in about four hours, thereby effecting a great saving of time, labour, and cost in safely proving the position of the old workings.

Stand 323.—Acaster, Patent Rail Joint Company, Castle Court, Sheffield. The advantages of the joint are:—1. Extreme simplicity, the ease and rapidity with which it can be applied, its safety, the unparalleled smoothness of running which it ensures, and the consequent great reduction in wear and tear and rolling stock.—2. The absence of bolts and nuts, and of the friction they create.—3. The uniformity of strength throughout the whole length of rails, there being no bolt holes to weaken them.—4. The reduction of repairs and inspection to a minimum.—5. The acquisition of a joint which being made of steel, is as strong and elastic and more durable than the rail themselves.—6. The uniformity in the distance of the sleepers, there being no necessity, with this patent, to put joint sleepers nearer together than other sleepers.—7. The continuity of the groove in the rails, and the consequent facility of joining at any part. The joints can be rolled to suit any section of rails; can be rolled with the groove from end to end. The grooving does not increase the cost of rail, and decreases its weight, but curiously, as demonstrated by Mr. Price Williams, increases its strength.

Stand 326.—Henry Faija, C.E., 4, Great Queen-street, Westminster, exhibits—1. Cement testing plant, cement testing machine, cement gauges, briquette moulds and appliances.—2. Cement manufacturing plant, cement grinding mill, cement slurry dresser.—3. Specimens of concrete hardened by Faija's process.—4. Samples of raw materials from which it may be produced.—5. Illustrations of the process of manufacture.

Stand 328.—Askman Brothers and Wilson (Limited) Yorkshire, Steel and Engineering Works and Crucible Steel Foundry, exhibits—1. Patent crucible steel automatic points and crossings for tramways.—2. Patent steel-plates for tramway points.—3. Patent automatic couplings for tramway engine and cars.—4. Patent tramcar wheels, corf wheels, &c.—5. Large show case, containing samples of cast-steel, &c.—6. Display of miscellaneous castings and tramway exhibits.

Stand 345.—J. Quarmby, High-street, Oxford-road, Manchester. Improved railway chairs and sleepers, with wedge-locking attachment and wedges for same.

Stand 180.—James Walter Stables, Winsleydale Parade, Birstal, near Leeds. Apparatus for arresting or stopping the descent of cages in mines on the breakage of the ropes, and for preventing the overwinding of the cage. The apparatus is specially designed for cages running on guide-ropes, but it can be adapted so as to act equally well on wooden guides.

Stand 181.—George J. Lampen, and Co., Ingo-road Ironworks, Wakefield. (1.) Patent Clip Pulley. (2.) Skimmer for fixing in Boilers. (3.) Drills. (4.) Patent Signal-bells. (6.) Self-acting Hoist Protection. (6.) Safety Torch Lamp.

Stand 107.—Messrs. John Davis and Son, All Saints' Works, Derby, and 118, Newgate-street, London, exhibit, in Group II., a complete equipment of Scientific Instruments for Colliery and Mining Operations. Conspicious amongst these we notice the following:—

Davis's Improved Hedley Dials, with outside vernier, automatically checking the needle readings, and fitted with an improved and specially constructed Hoffman joint for instantaneously setting up and levelling the instrument. One specimen of these miners' dials is provided with a telescope, which is so adapted as to be interchangeable with the ordinary sights—thus saving the double purpose of a theodolite or a miner's dial. The Patent Hoffman Tripod Head is also shown as attached to theodolites and levels. The advantage of this universal joint is immense, compared with the old form of parallel plates.

Davis's Patent Self-Timing Anemometer.—This little tool is in appearance not unlike the Biram anemometers manufactured by this firm, and in general use during the last 30 years. It measures about 4½ in. in diameter, reads feet per second, thus dispensing with the necessity of a watch, and, as the hand runs back to zero automatically after the observation is taken, a deal of time and trouble is saved by not having to read the indices at starting and in subsequent calculations. The ordinary Biram anemometers are also well represented, there being some eight or ten sizes and forms from 1½ in. to 6 in. in diameter. Telephones, colliery signal-bells, steam-gauges, miners safety-lamps, from the old Davy to the most recently improved forms of the Muescler and Marsaut, and various other mining and surveying apparatus complete an exhibit of considerable interest to the engineer.

Stand 1086.—The Asbestos Company (Limited), 161, Queen Victoria-street, London, exhibits Asbestos Packing Machine, for making pure Italian asbestos gland packing with either round or square section. (2.) Specimens of Packing. The extensive preparing, condensing, and other machinery of the United Asbestos Company (Limited) have been designed and fitted up at their works at Harefield, and being of a special and in many respects novel description, embracing the most recent improvements, the directors have not thought it desirable to exhibit it. Asbestos may be considered one of the greatest curiosities of the earth's production. Some in veins like quartz, and although almost as hard, its fibrous threads can be rubbed away with the thumb nail, while other samples are in sheets or slabs soft to the touch, long in thread, looking like a greasy pipe-clay or soft schist. Although asbestos has been known of for ages it is only within the last few years that it has been brought into so much practical use and its real value known. The Asbestos Company was formed a few years since, and have acquired extensive properties near Milan, Italy, from whence they derive their main supply of the best quality. It lies in beds or pockets, and as taken from the mines resembles slates or bundles of stringing light grey or brown compressed clay. The Italian asbestos is distinguished by its length and strength of fibre and its chemical purity, and the ease with which it can be manufactured. Asbestos is now being manufactured for many purposes, and being indestructible by fire and the action of most chemicals, is made into ladders, ropes, &c., for fire escapes, curtains and scenes for theatres, filters and strainers for domestic purposes, and chemical liquids. Although the principal sources of supply hitherto has been in Italy, other countries are also becoming producers of this valuable product. Canada, Corsica, United States of America, Australia, and parts of the United Kingdom. The many uses to which it can be applied will render the industry an important and rapidly increasing one as also, we hope, profitable to the enterprising projectors of the industry. No other discoveries have as yet been made of equal value to those in Italy, and of which this company holds such extensive mines.

The manufacture of asbestos fire-proof paint is another important feature of this company's operations, and was introduced by them in 1881. Since then it has come into great favour, its value has been practically demonstrated, and was used at the International Fisheries and Health Exhibitions, when nearly 100 tons of the paint were "the Salamander brand," used in the buildings and in consequence a reduction of 50 per cent. on the insurance was effected. The Asbestos Company have obtained prize medals at the exhibition at Paris, 1878; Crystal Palace (London), 1882; Alexandra Palace, 1882; International Health Exhibition, 1884; and special diploma Fisheries Exhibition, 1883.

Stand 110.—W. E. Garforth, mining engineer, Halesfield, Normanton. (1.) Fire-damp Detector, and Safety-lamps. (2.) Dial Centre and Improved Plumb-line attachment. The fire-damp detector is a small india-rubber hand ball without a valve of any description, and can be carried in the miner's or viewer's pockets. The working places can be frequently examined, and samples of suspected atmosphere bottled-up and taken away in the ball, and tested in a safe place. If gas be present it burns at the end of the mouthpiece like an ordinary gas jet. It is a useful and ingenious invention.

Stand 147.—B. and S. Massey, Openshaw, Manchester.—(1.) Patent Steam-hammer controlled by foot. (2.) Patent Steam-hammer with improved wrought-iron framing. (3.) Patent Suspended Steam-hammer. (4.) Hash's Patent Steam Power Hammer. (5.) Saw for cutting metals. (6.) Model of Patent Steam-hammer. The action of the small-sized steam hammer is controlled by the foot and specially designed for smith's work of every kind, enabling one smith to do heavy work without an assistant. The self-acting motion is of the simplest and most effective kind, working without jar or shock. These steam hammers are made all sizes, from ½ cwt. to 10 cwt., and giving blows from 400 to 200 per minute. The form of framing combines the utmost strength with remarkable convenience for working. It consists of two castings separate from the base plate and cylinder, and allowing a shaft to be laid across the anvil in either direction.

Stand 152.—Dr. R. J. Atcherley, 37, Ashchurch-grove, Shepherd's Bush, W., exhibits the Continuous Rain Amalgamator (Atcherley's Patent). For the treatment of pulp or slimes containing finely divided gold (flour, float, or sponge), and for the treating of gold pulp from the quartz mill, or the fine tailings from hydraulic undercurrent sluices. The advantages claimed by the inventor for this amalgamator are the simplicity of action, there being only one moving part—viz., the elevator, which consists of a simple screw working in top and bottom bearings. Once the adjustment is made the amalgamator requires little or no attention. Facility of adaptation, as it can be readily fitted to existing mills. Great area of mercurial surface. The quicksilver is raised from the lower well by an archimedian screw working in a cylinder, and delivered in a distributing trough, which feeds three or four other troughs placed transversely (about 2 in.) over the corrugated copper-plates, and as the slimes and crushed matrix passes from the stamp boxes on the plates showers of mercury fall on the material, thoroughly mixing with it, and gets caught again in the well, and by the screw raised over and over again for redistribution in the shower. When the mercury is sufficiently charged with gold it can be drawn off and squeezed through leather, and the amalgam obtained for retorting. Solid and semi-solid amalgam is delivered automatically in gauze strainers, frequent squeezing of mercury being thus rendered unnecessary. As the body of the pulp passing over the corrugated plates is brought under the influence of the mercury by the continuous showers and the rivulets of mercury running down the corrugated plates it appears to be well adapted for saving float, flour, and sponge gold, so much of which is now lost. The process is entirely mechanical in its application, and requires no chemical or electrical assistance.

Stand 153.—The Cassel Gold Extracting Company (Limited), 157, West George-street, Glasgow; London Works, Verulum-street, E.C. Inventor and manager, Mr. Henry R. Cassel. The Cassel process, for the treatment of rebellious and refractory gold ores, has already received much favourable attention from authorities interested in gold mining. This remarkably ingenious invention having been submitted to crucial and practical experiments by competent experts, has been acquired by an influential proprietary in Glasgow, most of whom, it is satisfactory to note, are directors of the Tharsis Sulphur and Copper Company, who, having thoroughly satisfied themselves of the practicability of treating refractory gold ores according to Mr. Cassel's process, are arranging for its introduction on an extensive scale. The apparatus (of which a model is on view) consists of a number of tanks, in which drums containing the crushed ores are kept revolving, both being filled with salt water. Within the drums are arranged a number of carbon rods, and these are connected with a dynamo-machine, and from the positive poles or anodes at which the nascent chlorine and oxygen are liberated by the electrolytic decomposition of the salt solution. The apparatus is exceedingly simple in construction and easily worked, and where water-power is available fuel can be dispensed with. The Cassel process is purely one of chlorination, but instead of the free gas being separately generated in the ordinary and costly way, the chlorine is evolved in the apparatus in the nascent state in contact with the ores, in which condition it has an immensely greater combining capacity for gold. At the same time the nascent oxygen is also generated, which, oxidising the sulphides, arsenides, &c., liberates the gold, the nascent chlorine at once converting it into a terchlorine. The iron in the pyrites would, under ordinary circumstances likewise be dissolved, and would consequently precipitate the gold. The addition of lime, however, which is a special feature in this invention, prevents the iron as well as all other metals except the gold from passing into solution. Common salt solution or sea water and lime are the only substances used, and practically the whole of the gold is extracted.

By the revolution of the drums the particles of ore are continuously thrown against the carbon rods, where both the nascent chlorine and oxygen are generated, and they are thus brought into intimate chemical and electrical contact therewith.

The periphery of the drum is a filter of asbestos cloth, through which the gold solution percolates, and by the laws of electrolysis, as in electro-plating, it is precipitated as the negative pole in the outside tank. When a sufficient quantity has accumulated this can be collected and run into ingots. The gold having become liquified and percolated through the asbestos cloth is precipitated as a black slime in an apparently unmarketable form at the bottom of the tank, from whence it can be kept from interference, except during the regular process of cleaning up in the presence of the proper officers. By this process all gold ores of the most refractory nature can be successfully and economically treated, the cost varying from 5s. to 10s. per ton, exclusive of mining and milling. Compounds of antimony, arsenic, bismuth, sulphur, tillurium, &c., are decomposed with the greatest facility, and at once yield their auriferous contents. There is no mercury used, neither roasting or smelting, neither are there acids or expensive chemicals required, nor a cumbersome or expensive apparatus for the generation of chlorine gas.

From the many millions of tons of gold ores already operated on, and in the tailings left, a large proportion of refractory ores is distributed offers a large field for the profitable working of the Cassel process, as also in the development of mining quartz lodes in Australia, New Zealand, America, Africa, and other parts. Most of these lodes can be rendered much more productive by the introduction of Mr. Cassel's ingenious and economical system of gold extraction, in addition to the appliances now in use in most well regulated reduction works. The apparatus and the operations being so simple and economical in character will be a great feature in recommending its general use.

Stand 119.—P. S. Justice and Co., 55 and 56, Chancery-lane, London, W.C. Improvements in Direct-acting Gas-furnaces and Producers. Casson-Bicheraux type for heating, smelting, or otherwise treating metals, minerals, and other, or similar, materials.

Stand 120.—Head, Wrightson and Co., Stockton-on-Tees, and 7, Westminster Chambers, London. New form of centre crane for Bessemer steel plant, being model of crane now in use at the works of the North-Eastern Steel Company, Middlesborough. The object of the invention is the automatic balancing of the variable weight in the ladle.

Stand 170.—Joshua Buckton and Co. (Limited), Well House Foundry, Meadow Lane, Leeds: 50-ton Testing Machine, with patent autographic indicator attached.

Stand 172.—Pyrites Smelting Company (Limited), 38, Threadneedle-street, London, E.C. Huntingdon and Koch Amalgamating Apparatus for gold and silver process for extracting precious metals from their ores.

Stand 173.—Scott, Ernest, and Co., Close Works, Newcastle-on-Tyne. Scott and Hilders' Machine, for extracting iron from other substances by means of electro-magnetism. By its use engineers refuse and metal borings are specially rendered valuable, while ore can be economically worked in it. Special attention is invited to the automatic manner in which the iron is released from the magnets. The inventors intend applying this principle to extract iron pyrites, &c., from gold quartz and other ores, and magnetic iron from sea sand, &c.; in fact, the uses to which this machine can be applied are numerous, and will prove to be a profitable utiliser of waste articles. There is also on view at this stand a model of a washing-machine for cleaning brass after the iron has been separated from it; also a display of highly-finished brass taps valves and water guages made out of the savings of the machine from the dust and shop sweepings. This is an exceedingly interesting and attractive exhibit.

Stand 174.—Charles Sheppard, Bridgend, South Wales. (1.) Coal-washing Machine (model); Elevators and Conveyance Screws (full size. (2.) The Dead Weight Crushing Mill (model). By the use of Sheppard's patent coal-washing machine upwards of 2,500,000 tons of coal are washed annually. The machine is self-contained, and no foul water is discharged from it; consequently, the fine coal carried off with the water by other methods is retained and utilised, which amounts to 7½ to 10 per cent. There are two discharges from the machine—one for the clean coal and one for the rubbish; the coal being thoroughly washed is delivered free from impurity, and the shale or rubbish is removed free of coal. The coal is raised from the machine by an elevator, having perforated buckets, allowing the water to drain out and return to be used over again, and the same method is adopted for raising the rubbish. The quantity of water required is very small. No foul water being discharged is also very important as regards the pollution of rivers. There are no pumps to pump back the water from settling ponds, &c., the settling chamber, which is an important part of the machine, being contained in it, and the fine coal deposited is raised at the same time as the larger particles, so that the fine and coarse go to form one uniform quality of coke. As regards the cost of working this machine will compare favourably with any in use, the coal being delivered into the hopper, where the elevator can reach it, the labour of only one man and a lad is required to work the largest size machine—to wash 200 or 250 tons per day of 10 hours, delivering the clean coal into a hopper or wagon, and the rubbish into a tram. The wear and tear is small, and little space required to erect the machine. Nut coal of any size up to 2 in. square can be washed as well as fine coal, and the expensive method of hand-picking the shale done away with.—Sheppard's Dead Weight Crushing Mill: The principal feature of this mill is the heavy crushing roll, which can be made of any desired weight—say, from 2 to 10 tons and upwards. It is kept in position by two arms pivoted at one end, and while allowing the roll to rise or fall freely its weight is always dead on the material being crushed. The large roll is made to turn by contact with the lower one, the lower roll being driven by cog-gearing. The lower roll is about one-half the diameter of the crusher. It is a simple and effective machine for reducing coal in a wet or dry state to the degree of fineness necessary to produce a good dense coke, now so much desired for blast-furnaces and foundries. The Crushing Mill, in addition to the crushing of coal, is specially adapted for crushing any kind of stone, ores, or gold quartz, and the inventors propose giving prominence to this feature of the merits of the machine, which we think they will be right in doing, as the principle once applied to quartz crushing and found to work satisfactorily the field for its profitable uses is practically unlimited.

Stand 178.—Arthur Latch, 23, Great George-street, Westminster. George Elliot and Co., manufacturers. Improvements in the constructing of Metal Ropes, Strands, Bands, Cables, Tubes, &c.

The Patent Locked Wire-Rope. This is a most peculiar and ingenious invention for the construction of wire-ropes for haulage from mines, guide ropes in the shafts, cables, tubes, &c. The advantags of these ropes are:—The greater roundness of the rope, as compared with the old standard make, and the consequent increased surface to take the friction. Their less weight, strength for strength, compared with the old construction; for instance, a locked coil, 3 in. circumference, weighing 13¼ lbs. per fathom, equals the old style rope 4 in. circumference, weighing 18¼ lbs. per fathom. The protection afforded to the inside coils by the outside layer prevents the damage to the inner coils from friction, and these inner coils, which are never exposed, constitute half the strength of the rope, and afford great safety. The wires are flattened and ribbed, and by compression in the twisting are firmly locked together. No one wire can rise out of its place, and this locked coil is more flexible than the old style. The shapes and sizes of the wire are varied and combined in many ways to make ropes of different degrees of fiexibility, according to the work they are required to do.

Stand 179.—S. Francis Pilcher, 162, Great Portland-street, London, N. Balance Double-Acting Man-Engine. An application of a lift adapted for use in mining in lieu of rope, chain, cage, &c.

Stand 346.—Henry Bridgewater, Watford, Herts. Railway Chair with Bridgewater's Patent Interlocking Key and Jaw. The advantages are that the keys when driven cannot work out, keeping the rails firmly in position, and preventing the working of the parts, thereby maintaining a better road and adding to its life. The jaw or cheek of the chair is circularly bevelled, so as to admit of the easy entrance of the key, and narrowing from the entrance to the commencement of the grooves, when the space is reduced by ⅛ or 3-16. The key must necessarily be depressed in passing this point, and by the provision of the grooves there is room for the full thickness of the key, and for its subsequent expansion into the grooves, the divisions between the grooves preventing all vertical movement in the key, and the grooves with the narrow part of bevelled entrance preventing all horizontal movement, so that not only the keys cannot work out, but they cannot work loose. Besides the advantages above described, the saving in metal by the bevelling and grooving more than equals a royalty of 1s. per ton, so that with this royalty there would practically be not only no charge for patent right, but an actual saving of first cost.

Stand 198.—George Bower, St Neots, Hunts. Drawings of Bower-Barff Furnace and specimens of ron and steel rendered rustless by the process, which consists in subjecting articles when at red-heat to the action of super-heated steam or air, by which the iron combines with the oxygen and produces a coating of magnetic oxide, which is not affected by ordinary atmospheric conditions. Samples are shown which have been exposed five years to the atmosphere without any apparent loss of original surface. Another specimen of ornamental ironwork with gold bronze deposited in the metallic state from their chlorides by the application of heat. Cost of rendering iron rustless by this process from 4*l.* to 5*l.* per ton.

Stand 182.—W. T. and W. H. Lewis, Matley, Aberdare, South Wales, and Twyford, Berks. (1.) Automatic Gear for the Prevention of Overwinding. (2.) Half size model showing the application of a simple form of this automatic gear to the steam valve and reversing levers of an ordinary winding-engine.

Stand 443.—Hodgkinson and Co. (Limited), Ordsal Machine Works Woden-street, Salford, Manchester, exhibit Hodgkinson's Patent Mechanical Stoker and Fire-Bars for Feeding Steam-Boiler and other Furnaces Automatically. This machine has now been in operation for over four years, and the great sale it has acquired in that time attests its superiority. It is extremely simple in its mechanism, being absolutely without small working parts, hence not only is there absence of breakdowns but it is very easy to manage, whilst hand firing can be as readily resorted to as before its application if desired, there being a fire door of the ordinary size. It is, however, upon the ground of economy that the stoker has been so successful, the outlay being speedily repaid in the saving effected, amounting frequently to 30 per cent., with a minimum of 10 per cent. So confident are the inventors of its merits that they offer to supply them for one mouth's free trial, and if not found satisfactory can be returned without charge. The machine projects or scatters the coal equally upon the fire-bars, throwing it perfectly level, and produces excellent results upon the common fire-bars as used in hand firing, but with the use of their patent self-cleaning fire-bars the clinkers and refuse are carried away as made, thus dispensing with cleaning out in the ordinary way, and keeps the fire continually clean and bright. Numerous testimonials speak of the high value of this mechanical stoker.

Messrs. Bass and Co., brewers, say—"Nothing could make a more level or better fire." Messrs. Charrington—"The machine is very satisfactory, and we are giving a further order." Messrs. Truman, Hanbury, and Buxton—"We have had your machine at work over 12 months. It works very satisfactorily. In a test competition with hand firing with large coal the stoker produced equal results with slack at half the price. This test was carried on for a fortnight." Many others of similar tenor.

Stand 113.—The Luminous Safety-Lamp for exploring mines, Balmain's patent. Agent W. G. Horne, 5A, Aldermanbury, London, E.C. This light is not secured by phosphorus, or combustion of any kind, by means of Balmain's patent luminous paint, painted on thin sheets of light material, and worn in front of a person like an apron. A few of these, it is contended, will practically serve to explore mines when lights are extinguished, or will not, or is not safe to burn. Also useful for lamps in spirit rooms, powder magazines, and for night work in flour mills. These lamps would be useful adjuncts in mines, and other places where occasionally required, there being no danger attendant on their use, are very inexpensive in cost. The chief object to recollect is that they require to be exposed to day-light during the day to absorb the luminous properties for giving a light in dark places. It may be termed a cold lamp.

Stand 169.—Hand-Power Rock-Drill Company (Limited), 4, Copthall Buildings, London, E.C. Jordan Burton's patent hand-power rock-drill.

Stand 183.—Thomas and William Brown, Manchester-road East, Little Hutton, near Manchester. Patent Safety Catch for Wire-rope Guides, to prevent accidents from the breakage of the rope, band, or chain by which the cage or other such arrangement is held or suspended.

Stand 350.—Leadbeater's Patent Railway Chairs, exhibited by Samuel Leadbeater, Machine Maker, Morley, near Leeds. Patent railway chair, single and joint, dispensing with wooden keys and fish-plates, nuts and bolts. The object of this patent single or intermediate chair is to dispense with wooden keys, which, by often getting loose in hot weather, cause trouble and expense in looking after, and sometimes accidents. Instead of a wooden key a cast-iron wedge is used, tightened with a wrought-iron key, which, when driven home into the narrow opening or keyhole between the wedge and the shoulder of the chair, is forced downwards and forwards until it is tight against the rail; thus the whole forms one solid block, and the small end of the key, which is split, being turned back each way, it cannot come out, and the wedge cannot possibly get loose. Neither the wedge or key is affected to any appreciable extent by variations in temperature. The double or joint chair is formed like the intermediate chair, but is nearly twice the width, and two studs are cast on the chair, or on the wedge, whichever is preferred, to pass into the end hole of each rail, to prevent the chair from jetting out. The object of the joint chair is to do away with fish-plates, bolts, and nuts, which, it is contended are not only more expensive, but like wooden keys, require constant supervision, whilst these chairs, once fixed, will not require touching until the rail is worn and wants turning.

Stand 620.—The Welch-Parker Smith Automatic Continuous Brake. The fearful calamities attendant with the serious loss of life and injuries resulting from railway disasters have for some time occupied the attention of inventors how best to diminish the dangers, and by stopping a train quickly rendering railway travelling more speedy, safe, and pleasant. Several forms of brakes have been introduced and worked with fair success; but they have for the most part been complicated in machinery and expensive in construction, and could not be termed truly automatic. The patentees of the Welch-Parker Smith brake have directed their attention to this important question, whicn has resulted in the construction of a brake that may be pronounced truly automatic in principle and thoroughly reliable in action; the design is exceedingly simple, cheap in construction and easily operated. The action of the Welch-Parker Smith brake depends entirely upon the unfailing certainty of the simple action of gravity; the weight of the piston alone, operating through a pair of levers, arranged in such a manner as to concentrate the whole power of the apparatus upon the brake-blocks at the moment they touch the wheels. This action of the piston is controlled either by a vacuum or compressed air, the former being caused to act at the upper side of the piston, while when the latter is used, it operated upon the annulus beneath it. A reduction of this vacuum or pressure means, therefore, a descent of the piston and the application of brake-power in a corresponding proportion to that reduction within the cylinder and continuous pipe. Thus, to apply the brakes to the fullest extent the continuous pipe must be put into open communication with the atmosphere; this permits the instant destruction of the vacuum or escape of the compressed air, and will allow the piston to descend to its lowest position, producing the maximum brake pressure. It can be seen that by the separation of the train or other accidental cause the same result is immediately obtained, and the brakes applied fully throughout the train. The advantages of the Welch-Parker Smith system of brake may be enumerated as follows:—The normal condition of the brake being essentially "on," it must be definitely taken off before the train can move, thus insuring that all is in working order before starting. With each vehicle is also provided a hand-gear for working the brake by hand when disconnected from the engine, or when used in conjunction with a slip coupling, or for the purpose of shunting. It is, however, impossible to fasten off the brake on any particular vehicle against the engine driver, who, on connecting his engine with the train, and establishing the pneumatic action, immediately obtains control of all the brakes, the hand gears automatically fall out of action.—Power: The brake is by preference arranged to give a maximum combined pressure upon the blocks of each vehicle equal to the weight of that vehicle when in running order. Much greater pressure may, however, be attained if desired. The action is instantaneous and simultaneous throughout the train.—Graduating: By means of a special valve the driver is enabled to reduce the amount of vacuum or air pressure at will, maintaining it at the required amount for any length of time, thus permitting him to apply the brake as little or as much as possible, and to maintain it in that condition without attention. It is impossible to over-estimate the great value of this important improvement in continuous brakes. This brake is thoroughly automatic, and instantly self-acting in case of accident to the coupling of a train. It is not conditionally automatic, depending upon the due performance of other operations, but really automatic in itself, under all conditions. As the breaking pressure is produced by the gravity of the piston and brake gear, it follows that it must always be present, and cannot be impaired by breaking or failure of the engine fittings, the certainty of action rendering it of special value. Its construction is entirely of metal, and the employment of valves and other delicate mechanism being in this system entirely avoided. An immense saving in the cost of construction and maintenance is insured, and when once the brake is fitted it will require none or little attention, as they automatically adjust themselves to wear. We can but think this brake supplies a desideratum for railways long wanted, that of an economical, simple, and effective automatic brake.

THE ATLANTIC AND EASTERN STEAM-SHIP COMPANY (Limited).—Capital 500,000*l.*, in shares of 10*l.* The objects of this company are to purchase or acquire all or anyone of the steam-ships or sailing ships owned or partly owned by John Glynn and Sons, of Liverpool, and to purchase, build, charter, and equip, and trade with steam or other ships. Also to purchase, sell, or trade in live stock, coal, timber, and other merchandise for purpose of freighting the company's vessels, and to carry on the business of shipowners generally. The subscribers (who take one share each) are—Dashper E. Glynn, 20, Water-street, Liverpool; Walter Glynn, 20, Water-street, Liverpool; Edward Glynn, 20, Water-street, Liverpool; John Glynn, 20, Water-street, Liverpool; Joseph Hepburn, 11, Red Cross-street, Liverpool; Charles Crossfield, 323, Vauxhall-road, Liverpool; James Barrow, 323, Vauxhall-road, Liverpool.

CHARLES S. WINDOVER AND COMPANY (Limited).—Capital 60,000*l.*, in shares of 10*l.* Has for its object to carry into effect an agreement dated May 29th, 1885, bteween Charles Sandford Windover, of Huntingdon, coach builder, of the one part, and George Bruton, of Burton-on-Trent, of the other part, for the purchase of the premises and leases of Nos. 30 to 33, Long Acre, and of No. 154, Piccadilly, for the purpose of carrying on the business of coach builders or harness makers in all their various branches. The subscribers (who take one share each) are—Victor A. Monbyn, 12, Halkin-street, West, post captain R.N.; Oliver G. Powlitt, 36, Charles-street, Berkley-square, lieut.-colonel; Alfred C. Duncombe, Calwick Abbey, Ashbourne; G. F. Peacock, 100, St. George's-square, S.W.; William Sharp, 42, Bristol-road, Birmingham; Charles S. Windover, Huntingdon; George Barston, Burton-on-Trent, solicitor.

MANCHESTER ASSOCIATION OF EMPLOYERS AND FOREMEN.—The half-yearly meeting of the members of the above association was held on Saturday, in the Manchester Technical School, Mr. W. H. Bailey (the President) occupying the chair. The business was chiefly of a formal character; four new honorary and three ordinary members were elected, and it was resolved, if satisfactory arrangements for visits to various works in the neighbourhood could be secured, that the usual summer excursion of the society should be made to Lancaster.

American Mining Notes.

(FROM OUR OWN CORRESPONDENT.)

NEW YORK, JUNE 4.

The position of lead in the American market is, on the whole, a matter of little interest to the English trade. Protected by a prohibitive duty our imports foot up to only a few thousand tons annually, which are re-exported in manufactured form—chiefly as solder for petroleum cans—under the drawback clauses of our tariff. Our exports have practically been *nil* for many years, and it would take a very heavy increase in the make to crowd out values down to the export point, still the shareholders in a number of English companies, notably the Richmond and the La Plata, are deeply interested in the metal, because a goodly share of their dividends depends upon the returns received for the lead. While it is true that as a producer of the metal the Richmond has ceased to be a factor of more than secondary importance, its management can at any time make itself keenly felt in the market, being one of the heaviest holders. It is a question which remains for the stockholders to decide whether they approve of a policy of clinging indefinitely to large blocks of lead waiting for high prices, with the attendant high charges of interest. The Richmond Company has certainly been exceedingly fortunate in the past in securing round prices. But it has now waited for years, has declined fair offers years ago, and from the present aspect of affairs is not likely to get any better opportunities in the near future. Since the last great sale of Richmond lead, years ago, speculation has over and over again tried to force values upward without prominent success. The conditions affecting the situation of the metal have undergone radical changes. When the Richmond Company flourished as one of the greatest producers of lead, very large portions of the Rocky Mountains were inaccessible, only ores high in lead were looked at, districts now great had not been discovered, fuel was ruinously high, transportation charges could only be kept within limits by starting wagons along the track, metallurgical skill was not up to its present standard, desilvering and refining cost three times what it is done for now, &c. A good deal of surprise is often expressed that production goes on increasing, or at least continues to hold its own, in spite of the fact that large individual mines, like the Horn Silver, with a yield of 12,000 to 15,000 tons annually drops out of the line, and in spite of the fact that great districts like Leadville are on the decline. It seems reasonable to hope that under such circumstances the supply must diminish greatly, and prices must advance. It may be well to explain why these contingencies do not arise. The principal reason, I take it, is that costs of production and of marketing have fallen very much during the past few years. Then even the best located works in the west could not smelt their ores for less than $15 per ton. Now, I know of one establishment which does it for $5·50, and the majority of the smelters of the Valley in Colorado—that is, at Pueblo and Denver—do it for about $7 to $8. The decline is even greater than is apparent on the face, because the result of decreased cost has been to make it possible to treat ores lower in lead, and to smelt in addition large quantities of so-called "dry silver ores"—that is, ores carrying practically no lead, but valuable for their silver contents. I question whether anywhere in the world such excellent work is performed as in our western works in smelting, so far as quantity of ores run through, high produce of charge, low contents of metal, and low losses. The result is that prices are paid to miners which are remunerative now for ores cast upon the dump a few years since, and that now the large reserves of low grade ore yield their metal contents. This means that our lead production is getting to be more and more independent of the fortunes of individual mines or of single districts. Another very important point deserves consideration. Important and highly successful works have been established whose existence is based upon the possession of lead mines whose ores are high in that metal, but which do not contain more than 6 to 12 ozs. of silver. Five years ago such deposits would not have been touched. Now they furnish large quantities of ores, which are practically used simply as a flux for working "dry" ores carrying no lead, bought in the open market. Other works have followed the same example, though they are in the unfavourable position of being forced to buy their lead ores. They have been bidding against one another until they actually pay more for the lead in the ore than they can by any possible chance get out of it, hoping to recoup themselves by cheap purchases of dry ores. These facts account in a general way for the enormous production of the country in spite of the falling away of some of the most important mines. For months lead has held its own at 3·60 to 3·65 cents. An increased consumption might help the market materially, but would, on the other hand, stimulate the output. It is difficult to see, therefore, how the Richmond Company can succeed for many months to come in getting the famous 4 cents for which it held so many years. Not long ago it was willing to part with its whole stock at 3·65 cents, but could not get any bids.

The La Plata Company is, of course, specially affected by the situation at Leadville, where the smelting-works have been having a very hard time of it. The Pueblo Smelting and Refining Company of Pueblo, one of the Valley smelters, have been very uncomfortable competitors. They have contracts now running, and are renewing them as they expire, according to which they pay 35 to 40 cents per unit for lead contents, with $5 off for smelting charges for ore delivered at Leadville. It cost them $5 a ton on the gross weight, or (say) $5·25 on the dry weight for freight to Pueblo, which swallows up the "smelting charge." As lead is worth only about $35 per ton at Leadville as base bullion, it will be seen that, allowing for unavoidable losses in smelting, the Pueblo Company absolutely pays more for the lead than it gets for it, and must be out of pocket about $7, the cost of smelting on every ton so contracted for. The Pueblo Company and the other Valley smelters compensate for their loss on the lead ores by getting dry ores, often on very satisfactory margins, from other sources in Utah, Arizona, and New Mexico. The Leadville Works must stand the strong competition of these works, and of one another, and thus the price of dry ores in Leadville has been carried up to full payment of 95 per cent. on the silver contents, less a charge of $12 to $15 for smelting. The majority of the Leadville smelters will not be able to hold out long unless there is a reduction from the present price of coke ($15 a ton) or a lowering of freights on base bullion to Denver or Pueblo from the ruling rate ($12 per ton). To-day there are only 12 out of 30 furnaces running. Along with the other works, the La Plata is severely handicapped in this manner. Fortunately the company has a lead mine of its own, and that I believe is the property which is earning all the money which is being made. A friend of mine, who is one of the best posted mining men in Leadville, writes me that the product of the mine is about 35 tons per day, and that the La Plata ought to net $10,000 to $12,000 out of it. I understand that some vexatious litigation with the Crown Point has recently been settled in favour of the La Plata. I cannot help adding the following tribute from the pen of the gentleman referred to, to the memory of the late general manager, Mr. Henry Coom:—"He was a very efficient energetic manager. His popularity among mine owners and managers, and his reputation for integrity, insured the company much profitable business. They will find it very difficult to find a successor who will fill his place."

POWERFUL MILL ENGINES.

A pair of very powerful mill engines, which have been built by Messrs. GOODFELLOW and MATTHEW, of Hyde, for the Astley Mills, Hyde Junction, were on June 3 formally started in the presence of a numerous company of representatives of the principal mills in the district. The engines were run for the space of an hour, for the greater portion of the time at a speed of 48 revolutions per minute, and Mr. J. E. Lawton, the Chairman of the Astley Mills Company, said the directors felt the greatest satisfaction in the massive piece of work which the visitors had that day seen put into operation. The engines are a pair of compound horizontal condensing engines with valves on the Corlis's principle, fitted with Ramsbottom's well-known patent tripping gear. They are capable of indicating with economy upwards of 1300-horse power with a speed of 50 revolutions per minute, and a steam pressure of 100 lbs. per square inch.

The cylinders are placed side by side with cranks at opposite ends of the crank-shaft at right angles to each other, and the fly-rope pulley keyed on centre of shaft. The pulley is 34 ft. diameter to centre of ropes. The velocity of the periphery is, therefore, rather more than 1 mile a minute.

It is grooved for 32 1¾ in. diameter ropes, measures 7 ft. 3½ in. across the face, and weighs complete upwards of 80 tons. For convenience in construction and manipulation this pulley was made in two halves bolted together at the rim to form one rigid piece. Each half pulley contains one boss or centre, 12 arms, 12 segments of rim and necessary bolts, keys, and cotters.

The crank-shaft is of Whitworth's fluid compressed steel 17 in. diameter, 40 in. long in the main bearings, 19 in. diameter in the body of the shaft, and is swelled to 24 in. diameter in the middle for the rope pulley. The cranks are made of the best hammered iron, and, like the connecting rods, cross-heads, &c., are finished bright, the crank pins, which are of Whitworth's steel, 10 in. diameter and 10 in. long in the journals, are securely shrunk into cranks and keyed. The connecting rods are 17 ft. 6 in. long centre to centre, 9½ in. diameter in the middle, with a jaw end at the cross-head end, and fitted at the crank pin end with phosphor-bronze steps, secured by wrought-iron caps and mild steel bolts 4 in. diameter. The main cross-heads are fitted with phosphor-bronze steps 7½ in. bore 12 in. long, and are provided with a special arrangement, by which the slippers may be accurately adjusted to take up the wear, which will be but slight, owing to the large surface exposed to friction—viz., upwards of 420 square inches. The piston-rods are of best mild steel, 7 in. diameter in the body, securely cottered to cross-heads, and secured to the pistons by extra deep nuts screwed with special buttress thread. The pistons are of the most improved construction, fitted with hard cast-iron rings and steel helical spring; the low-pressure piston is 13 in. deep, and the high-pressure piston 10 in. deep, in addition to which shoes, 3 in. broad on the high-pressure piston and 4 in. broad on the low-pressure piston, are cast on each side, extending round one-third of the circumference, and the packing rings are so arranged that the maximum bearing surface is obtained. The high-pressure and low-pressure cylinders are 32 in. and 60 in. diameter respectively, 7 ft. stroke; each cylinder has two steam valves and two exhaust valves, all on the under side of the cylinders, so that the parts are easily got at, and no water can lodge in the cylinder or passage; the cut off on the high-pressure cylinder, which has a range from *nil* to three-fourths stroke, is worked automatically from the governor, that on the low-pressure cylinder being adjustable by hand. Each pair of valves is worked by a separate eccentric; these four eccentrics are keyed on the mild steel cross-shaft, which is driven by two pairs of steel bevel wheels, with double helical teeth, from the crank-shaft, through a diagonal shaft (also of mild steel) by the side of the high-pressure engine-frame. The governor is of the high-speed type, with improved combined counterweight and spring, and is coupled to the cut-off gear by adjustable rods and levers. A connection is also made from the governor to the automatic stop-valve, so that on the governor reaching either extreme of speed, through a breakdown of the governor or the engine running away from other causes, the valve is closed, steam is shut off, and the engine brought to a stand.

The air-pump, which has been specially designed by Messrs. Goodfellow and Matthews, and is introduced into all their engines, is worked from the low-pressure crosshead by two pairs of links and wrought-iron levers. The pump is 46 in. diameter, 2 ft. stroke; the condenser is 50 in. diameter, 7 ft. high, equal to a capacity of three-fourths that of the low-pressure cylinder. The bucket-valves, foot-valves, and delivery-valves are formed of a number of small indiarubber clacks, secured by gun-metal bolts and nuts. The foot-valves are so arranged that they may be examined and taken out without disturbing any other part. They are placed immediately under the air-pump barrel, so that the clearance between the bucket and the foot-valves is reduced to a minimum.

The main steam-pipes are 14 in. diameter; the receiver pipes between the cylinders 20 in. diameter; the exhaust from low-pressure cylinder to the condenser 22 in., tapering to 24 in. diameter; injection pipes, 10 in. diameter; feed pipes, 4 in. diameter; and overflow pipes from hot well, 18 in. diameter.

The engines have been made under the supervision of Messrs. A. Stott and Sons, of Manchester and Oldham.

Law Intelligence.

HIGH COURT OF JUSTICE.
CHANCERY DIVISION.
(Before Vice-Chancellor BACON.)

The Vice-Chancellor on Saturday, made the usual order for the compulsory winding up of the Mexican Silver Syndicate Company, on two petitions, one of which was presented by the syndicate and the other by Sir W. Smith and others.

Mr. Stanley Boulter appeared for the syndicate; Mr. E. K. Corrie for the creditors; Mr. Graham, who was interested in the company appeared in person and opposed.

The conduct of the order was given to Mr. Corrie's clients.

Messrs. Stephenson and Alexander, auctioneers, Cardiff, offered for sale, on Wednesday, at the King's Head Hotel, a valuable lot of colliery and other property situated at Aberbeeg, Llanhilleth, and other places in the Western valleys. The property known as Aberbeeg Colliery, with machinery, plant, and 10 coke ovens, was withdrawn at 12,000*l.*, the reserve price being 15,000*l.*; for the Llanhilleth Colliery and the Llanhileth New Pit there were no biddings; and the wharfage, land, and buildings, known as Powell's Wharf, Newport, were not offered. Royalties yielding 800*l.* per annum in the Twyn-y-Pentre property, together with the vendor's interest in them, produced biddings which commenced at 5000*l.*, and went up to 7000*l.*, when the property was withdrawn. Only one bid of 1000*l.* was made for the 100 acre freehold farm, known as Pantglass Farm, near Tredegar Junction, and the lot was also withdrawn.

The 12th annual meeting of the Tredegar Iron and Coal Company (Limited) was held at the London Offices, Queen-street, last week, Mr. B. Whitworth, M.P., Chairman of the board of directors, presiding. The gross profits for the year were 49,486*l.* 9s. 5d., leaving, after paying interest on loans, a nett profit of 36,895*l.* 13s. 11d. 3613*l.* 1s. 6d. of capital expenditure during the year was written off, and a balance of 6857*l.* 9s. 5d. was carried forward to next year. The balance brought forward from last year was 7674*l.* 17s. 10d. This left a sum of 44,570*l.* 10s. 11d., which was apportioned as follows:—Dividend declared, 3 per cent., and 5000*l.* carried forward to the reserve forward.

Registration of New Companies.

The following joint-stock companies have been duly registered:—

THE BRITISH AND NORTH PACIFIC MORTGAGE AND MORTGAGE GUARANTEE COMPANY (Limited).—Capital 500,000*l.*, in 5*l.* shares. This company has for its object to borrow money—not exceeding the prescribed capital of the company—on deposit receipts or debentures, and to lend money on the security of first mortgage of lands and heriditaments of freehold tenure, and with a margin of not less than 50 per cent. of its estimated cash value in excess of each loan, and to be situated in the State of Oregon, Territories of Washington and Idaho. Also in the Province of British Columbia. The subscribers (who take one share each) are—S. Young, 1, Lombard-court, E.C; Charles Clark, 20, Great St. Helens; Peter G. Laurie, 158, Leadenhall-street; H. W. Maynard, 34, Gracechurch-street; James Goodson, 32, Kensington Gardens-square, W.; John C. Bennett, 79, Queen-street; James Livingstone, 34, Gracechurch-street.

THE ATLANTIC AND EASTERN STEAMSHIP COMPANY (Limited).—Capital 500,000*l.*, in shares of 10*l.* Has for its objects the acquiring by purchase all or any or more of the steam or sailing ships belonging to Messrs. John Glynn and Son, of Liverpool, and any shares in them; also to build, charter, and equip, and to purchase steam or other ships, vessels, boats, and vessels of every description, and to carry on the business of shipowners, &c., in all its branches. The subscribers (who take one share each) are—D. Edward Glynn, 20, Water-street, Liverpool; Walter Glynn, 20, Water-street, Liverpool; George Hepburn, 11, Redcross-street, Liverpool; Charles J. Cresfield, 323, Vauxhall-road, Liverpool; James Barrow, 323, Vauxhall-road, Liverpool; E. D. Glynn, 20, Water-street, Liverpool; John Glynn, 20, Water-street, Liverpool.

THE NORTH EASTERN ICE COMPANY.—Capital 5000*l.*, in shares of 10*l.* The objects of this company are to acquire by purchase, and to carry on the business of the Norway Ice Company, now carried on at Sunderland and Newcastle-on-Tyne, also to purchase and charter steam and other vessels to carry ice and any other goods or merchandise, &c., and to purchase or acquire buildings, lands, tenements, lakes, and goodwill of the businesses of ice merchants carried on by any persons or companies. The first subscribers are—Thomas Hutchinson, 71, The Close, Newcastle-on-Tyne; Herman Nelson, 9, Queen-street, Newcastle-on-Tyne; L. Orkeldsen, Exchange Buildings, Sunderland, 10 shares each. Henry Campbell, Orchard-street, Newcastle-on-Tyne, 1 share; J. P. Castello, 30, Landhill, Newcastle-on Tyne, 1 share; B. Bruntnell, The Willows, Morpeth, 1 share; Henry Barry, Maldon-road, N.W., 1 share.

THE IMPROVED MARTIN'S ANCHOR COMPANY (Limited).—Capital 20,000*l.*, in shares of 10*l.* Has for its objects the adoption and carrying into effect an agreement dated May 30, 1885, made between James Alfred Hallett and Henry Davis Poole, of the one part, and Edgar José, as trustee for the company, of the other part, for the purchase of the two letters patent for the sole and exclusive license of making and vending the inventions for improvements in the construction of anchors. The consideration for same to be 10,000*l.*—3000*l.* in cash and remainder by 700 fully paid up shares. Also to manufacture and sell anchors, cables, chains, bolts, and rings. The first subscribers are—Henry Davis Poole, 33, Chancery-lane, 10; J. A. Hallett, 45, Norfolk-square, 10; Edgar José, Thelside, Hornsey, N., 1; R. E. Mudge, 64, Gellatley-road, Nunhead, 1; William C. Hallett, 7, St. Martin's-place, W.C., 1; Edward F. Mogg, Lebanon-gardens, Wandsworth, 1; Thomas J. Fox, 123, Loughborough-road, 1.

THE FARNBOROUGH (SURREY AND HANTS) DISTRICT WATER-WORKS COMPANY.—Capital 30,000*l.*, in 10*l.* shares. Has for its object the construction, &c., of waterworks, and the supply of water to the parishes of Farnborough, Frimley Ash, York Town, Cambridge Town, Crondall, &c.; also to sink and bore such wells or shafts, and to make and erect such tanks, reservoirs, and other works, as may be deemed necessary for supplying these parishes aforesaid with water. The subscribers (who take one share each) are—Edward Chatfield, Alexandra-road, Farnborough; Thomas G. Lithgow, Stirling House, Farnborough; George J. Wallis, The Limes, Farnborough; William Irvine, Harlesden, N.W.; Frank Irvine, 23, Villiers'-street; George R. Stratband, 98, Bishopsgate-street, E.C.; Thomas Whitwell, 27, Richmond-road, Dalston.

THE OLDHAM, ASHTON-UNDER-LYNE, AND HYDE STEAM TRAMWAYS COMPANY (Limited).—Capital 100,000*l.*, in shares of 10*l.* Has for its object the construction and laying down tramways in the county of Lancaster and adjoining counties. Also to equip, maintain, and work with horse, steam, or other mechanical power the tramways belonging or leased to the company, or which the company may have rights to run over or work. The subscribers (who take one share each) are—Hubert Bass, 26, Brecknock-crescent; Robert W. Daynes, 140, Bishop's-road, E.; Alfred Mason, 16, Bernard-street, Russell-square; George E. Friend, 4, Colosseum-terrace, Regent's Park; Walter R. Burgess, 41, Fenchurch-street, E.C.; William O. Grace, Junction-road, N.; Henry Tipple, Walthamstow.

BULLER, JOBSON, and Co. (Limited).—Capital 108,000*l.*, in shares of 20*l.* This company has for its object the adoption and carrying into effect certain agreement of date, May 20th, 1885, made between Howard Cochrane Jobson, Ernest Wentwort Buller, and John Thomas Harris of the one part, and Edward Percy Jobson on behalf of the company of the other part, to carry on the business of engineers, telegraphic engineers, ironfounders, and contractors in all their branches. The subscribers (who take one share each) are—Howard C. Jobson, 196, Wolverhampton-street, Dudley; Edward J. Jobson, 196, Wolverhampton-street, Dudley; Ernest W. Buller, 49, Charlotte-road, Birmingham; Redvers H. Buller, major-general, Downs, Devonshire; Arthur T. Buller, Greystoke, Cumberland; William H. Greenhill, 65, Coleman-row, Birmingham; John T. Harris, Eastwood House, Hanley.

THE BISHOPHOUSE MILL COMPANY (Limited).—Capital 20,000*l.*, in share of 50*l.* The objects of this company are to purchase, lease, or otherwise acquire lands and premises of any tenure for the purposes of the company, to carry into effect an agreement dated 27th May, 1885, between Edmund Heap, of the one part, and George Proctor of the other part. To carry on the business of spinning and weaving manufacturers, and dealers in cotton, woollen, and other fibrous substances, also dyeing, bleaching, and colouring same, and buying and selling yarns, cloth, &c. The subscribers (who take one share each) are—Edmund Heap, Burnley; James Hitchin, Burnley; James Hodgson, Burnley; Thomas Preston, Manchester-road, Burnley; Matthew Watson, Manchester-road, Burnley; Samuel Leather, Gas Works, Burnley; Joseph Graham, Carlton-road, Burnley; William Roberts, Netherfield House, Burnley.

THE TRANSVAAL GOLD EXPLORATION AND LAND COMPANY.—Capital 300,000*l.*, in shares of 1*l.* The objects of this company are to adopt and to carry into effect an agreement to acquire lands, mines, or property, and the rights of mining thereon, within the republic of South Africa and elsewhere. Also to construct rail and tramways, rolling stock, locomotives, and apparatus of every description suitable for mining purposes. The subscribers (who take one share each) are—Herbert E. Maguire, 3, Lombard-street, E.C.; Joseph Guedella, 21, Essex-street, W.C.; S. C. Connor, Palace Park-road, Sydenham; W. H. Farmer, Rosery Gardens; C. Cocombe, 9, King William-street, E.C.; Horace Farquhar, 9, King William-street, E.C.; Charles Tottenham, I, Grosvenor-place.

THE COSTA RICA GOLD MINING COMPANY (Limited).—Capital 500,000*l.*, in shares of 100*l.* Has for its objects the acquiring, &c., by purchase, mining concessions, timber and other lands, and property of every description; and to carry on in Great Britain, Costa Rica, and elsewhere, the business of mining and working gold, gold quartz, and other metals, also of extracting and preparing metals and mineral produce, and disposing of the same, and to carry on the business of mineowners, metal dealers, and workers in all their branches. The present subscribers (who take one share each) are—H. Bell, 81, Cheapside, E.C.; Alexander Munkittrich, 3, Pembroke Villas, Kensington, W.; Athol H. Thorne, 38, Old Jewry; Samuel B. Leeds, 84, Church-road, Islington; Thomas Pinke, 152, Spa Terrace, S.E.

THE AMERICAN METAL MARKET.

Messrs. MATHEWS and WEBB, Ore and Bullion Brokers, Denver, Colorado, write under date June 3:—Since our last issue general trade throughout the country has continued to be dull and unsatisfactory. The financial situation is by no means promising. The National Commercial Convention voted by 135 to 90 in favour of the suspension of silver coinage. Numerous State and other 3 per cent. bonds have recently been placed above par, and the Pennsylvania Railroad bids fair for $24,000,000 of bonds, when only one-sixth that amount were to be sold. At New York, call loans do not draw but 1, and 1½, and 2 per cent., while the associated banks show a surplus reserve of $59,812,075, which shows idle capital at that point and in their hands alone of $65,000,000 more than at this time last year. If to this amount we add the surplus in the savings and trust companies, and in the hands of private bankers, we must calculate, according to the best authorities, an idle capital at New York of over $250,000,000 at the present time. The only offsetting favourable point is a slight increase of gold balance in the Treasury. The railroad freight war shows no abatement, and the competition in staple articles has also kept their prices at a low ebb.

SILVER has again declined.

COPPER cannot seem to get very far from the medium line which it has been following for some time past, and Lake at New York has been selling moderately at 11½ c. per lb., with the outside brands 10⅝ c., 10¾ c., and 11 c. as to quality. The new electrolytic brand now ranks well up on a par with Lake. The pool sales are conducted with so much secrecy that it takes several days to get at the truth, and later developments showed that the domestic sale noted by us last week reached a total of 10,000,000 lbs., in place of 3,000,000, and that the deliveries will run along well to the end of the year, and will more than half fill all the wants of the largest consumers. The London racket is still kept up, and the vigorous hammer of the bears brought the price of Chili bars down from 44*l.* 5s. on May 22 to 43*l.* 5s. on May 28, since which time it has advanced again to 44*l* 12s. 6d., with best selected at 49*l.* The large domestic Lake sale and the closing of many mines here has discouraged the idea that lower prices will rule, and has created a better feeling.

LEAD has not varied from the previous quotations, and has ruled steady at $3·45 at St. Louis, $3·50 at Chicago, and $3·60 at New York for all the common brands, with corroding held at $3·65, and the aggregate sales of the week reaching a total of 2000 tons, or rather below the average. The surplus stocks, both east and west, have been materially reduced, as well as the ore reserves in the hands of smelters, and the conditions for an advance are all favourable were it not that June is a kind of midway month with manufacturers, too late for the corroders to buy freely, and too early for the shot demand. The cuts from St. Louis eastward in freights still tends to keep the New York market low, and the war in prices for pipe and sheet lead is more than ever bitter, in the hope of making a new combination acceptable all round at the annual June meeting.

H. R. MARSDEN'S EXHIBITS AT THE INTERNATIONAL INVENTIONS EXHIBITION, LONDON, 1885, —viz., One 8 in. by 6 in. at the mouth, Patent Lever Type Hand Hammer Motion Stone Breaker and Ore Crusher; and one 6 in. by 1½ in. Fine Crusher or Pulveriser.

Copy of Testimonial received by H. R. MARSDEN, Leeds, in favour of his latest Patent Stone Breaker.

Baggot-street Bridge Stone Works,

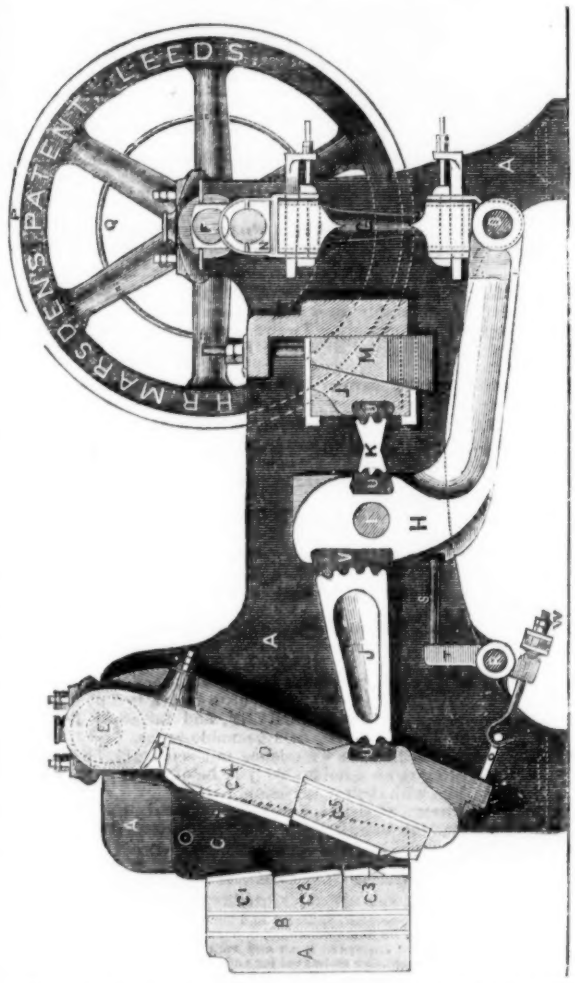
H. R. MARSDEN, Esq. Dublin, 13th April, 1885.

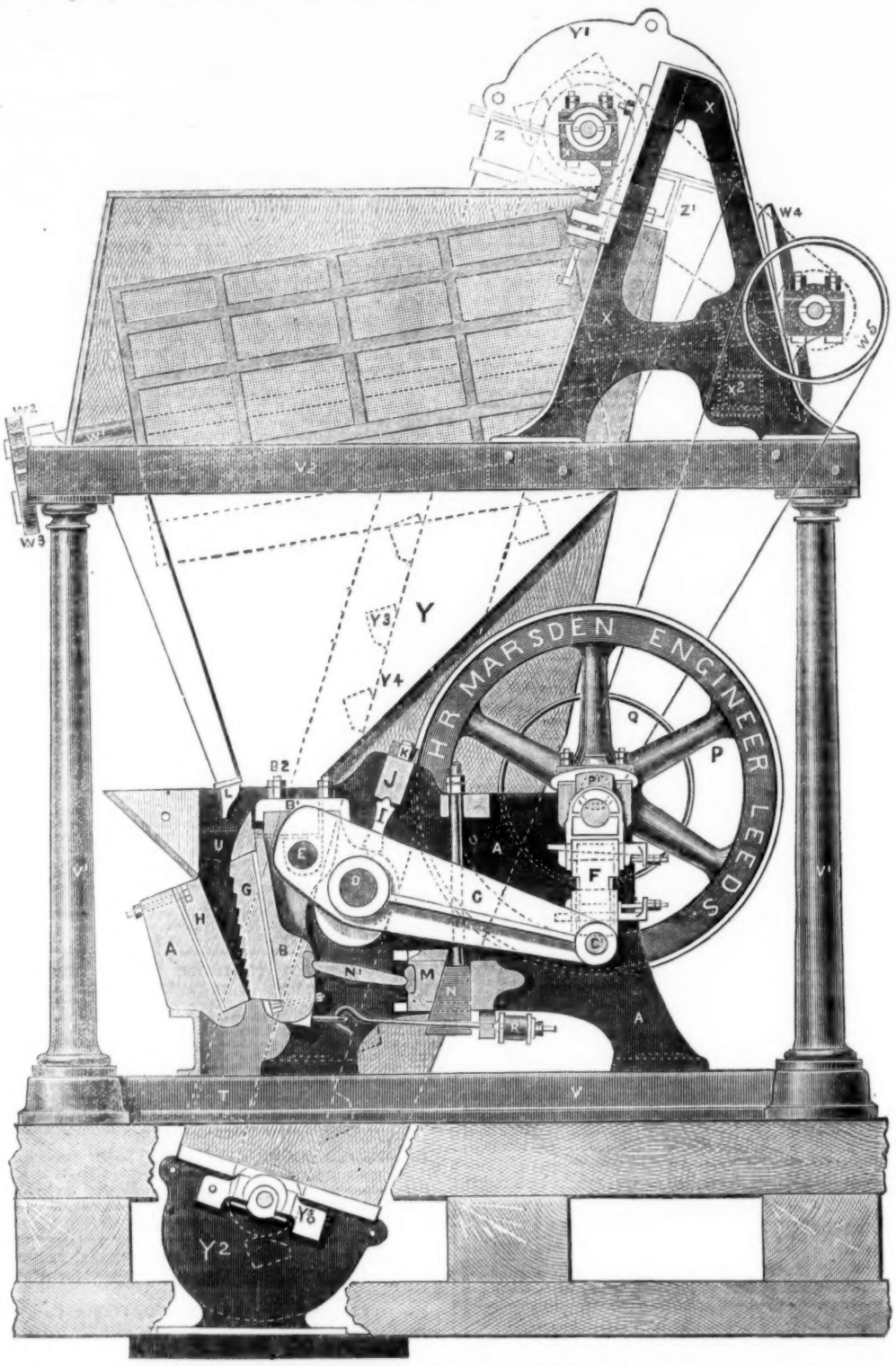
Dear Sir.—We have great pleasure in testifying to the efficiency of the 51 in. by 8 in. Lever Hand Hammer-Motion Stone Breaker you supplied us with. We find that our 4 H-P Engine with ease drives it 250 revolutions per minute, and breaks 6 tons per hour of the hardest "Diorite" Whinstone; the sample is much before any hand-broken we have ever got done. Our Mr. P. J. Graham, C.E., who was Surveyor of Highways for 10 years, before joining our firm says, it is by far the most economical machine he ever had to do with; he had two of your former make, and two of another firm's make; compared with these four machines your new patent gives the following advantages:—The horse-power required to drive is exactly 40 per cent. less. The waste in chippings 30 to 40 per cent. less. The sample of the broken macadam is so far superior to that broken by other machines, and even to that broken by hand that we can make no comparison. It is by far the best sample we have ever seen.

We are, truly yours,

GRAHAM AND CONNELL.

Road Contractors for the City of Dublin





The stone-breaker is an entirely new type of an old and well-known machine; it is driven in the usual way by a pulley, A, upon a crank, F, instead of an eccentric shaft; upon this shaft a connecting-rod, G, is attached, and at the other lower end of the connecting-rod is spindled one end of a solid crucible steel lever, the other end of which is fulcrumed to the minor frame, A; as the connecting-rod lifts up and down it actuates the lever, H, in such a manner that the toggles, J and K, give the necessary motion to the swinging fan, D, for breaking or crushing the material under treatment. One of the great advantages of this machine lies in the fact of there being a false back, B, accurately planned and fixed to the frame itself, against which the three fixed jaw faces (C 1, C 2, C 3) readily bed, thus avoiding any degree of concession, and also providing means whereby these faces can be renewed and reversed in position in a few minutes at any time without the use of white metal for running up. These faces are filled with surface strips on the backs, which also facilitate a dead bearing. The moving jaw, D, is accurately planed. The wearing faces (C 4 and C 5) of this are fitted in the same manner as the others. By an ingenious contrivance a positive drawback motion is imparted to the swing jaw, which takes no power to work, and which entirely dispenses with the old steel embedded india-rubber spring. This one advantage can hardly be over estimated, as the full power of the engine is employed in the reduction of the material. The frictional parts in this machine are greatly reduced, especially the main or crank shaft, F, which has been lessened 1 inch in diameter in a medium size machine. The adaptation of the parts is such as greatly to relieve the strain upon the machine, and the leverage gained has reduced the power required to drive by about one-half. The whole of the shafts and axles are made of best hammered steel, the bearings are pillowed throughout with brass bushes accurately bored, the toggle cushions, U and V, are of solid crucible cast-steel. One of the greatest advantages claimed for this machine is that by altering the position of the teeth of the front toggle, J, up or down upon the cushion, V, in the lever, H, the motion or length of stroke of the jaw, D, can be increased or decreased, and the size of the product regulated in this manner. The motion got by the use of this peculiarly formed toothed toggle and lever cushion gives an interrupted movement to the jaw to suit any kind of material, and this also prevents clogging. For a certain portion of the revolution of the fly-wheels, P, the jaw, D, is stationary, the result is a sudden blow by the material exactly similar to that of a man hitting the stone with a hand hammer, the result is a much better sample of road metal than it is possible to get by any other machine, and less waste in chippings, in fact the evidence of the City of Dublin Road Contractors who have used other kinds of stonebreakers is as follows:—The new machine takes exactly 40 per cent. less power to drive than any other—the waste of chippings is 30 to 40 per cent. less. The sample of the broken macadam is so far superior even to that broken by hand that no comparison can be made. These machines are made in sizes varying from 4 in. by 2 in. up to 30 in. by 24 in. at the mouth, and these are the sizes of material each machine will take in. A further evidence of the little power this new type takes to drive is shown in the 8 in. by 6 in. being capable of being worked by hand power; any other machine of this size takes from 1 to 2 horse-power.

The other machine exhibited is a fine crusher, or pulveriser, for reducing material of any degree of hardness to a small size, and, indeed to impalpable powder, or to any intermediate degree of fineness. It follows greatly in principle the well-known Blake-Marsden stone breaker and ore crusher, but with this advantage, that whereas that machine is limited in the fineness to which it will reduce, this allows nothing to pass out of it till it is of the fineness required, however fine that may be. The connecting-rod, F, which is attached to the end of the lever, C, is actuated by a crank-shaft, P, the lever is fulcrumed, and is spindled on the end of the grinding-jaw, B. At the commencement of every revolution till the centre is reached, the connecting-rod draws up the end of the lever, which causes the grinding-jaws to have a forward and downward motion of immense power upon the material in the mouth between the jaw faces, H and G. At the remaining portion of the revolution the exact reverse takes place, and the material operated upon falls into an elevator at the side, which conveys it to a polygonal screen fixed over the machine covered with gauze, according to the fineness of product required; all that is not fine enough passes out at the end of the screen through a small shoot into the mouth of the machine, and is again operated upon with the regular feed. Another advantage in this machine is in the fact of its being arranged for the material to operate in a great measure upon itself, thus avoiding the excessive wear in pulverising, as is the case with all other machines. In many places where pulverising is carried on water has to be conveyed at an immense cost to assist in the operation, and although this machine could be worked with water if desired a very substantial benefit is that it can be worked dry. It may be so placed as to feed itself and deliver the product (none of which can escape till of the required fineness) into bags or casks placed for its reception.

H. R. Marsden keeps machines of both types—the pulveriser and stone breaker—erected at his works for the purpose of operating upon buyers' own material in their presence, and has now nearly 6000 machines in operation in different parts of the world.

The above are in operation at the Inventions Exhibition, stand No. 5, group 10, west gallery.

THE COPPER TRADE.

Messrs. HARRINGTON, HOBAN, and Co., Liverpool, write under date June 15:—Chili copper charters for second half of May were advised on 1st inst. as 1700 tons fine, of which 900 tons bars and ingots for England and 800 tons for Continent. Price of bars was £17·02½ and exchange 25⅝d., since which latter has been advised up to 26d. During the past fortnight Chili bars fluctuated about 20s. per ton in value, and to-day the market is steady at our quotations. The business in furnace material comprises:—At Liverpool, 5) tons Quebrada regulus at 8s., 500 tons together with 2090 tons Quebrada ore (yellow) on private terms (presumably 8s. per unit), and 15) tons latter at 8s.—At Swansea: 240 tons Kurilla ore at 8s., 489 tons Bolivian ore ex Zeta, and 453 tons ex Kappa, and 150 tons Garonne ore at 8s. per unit.—Precipitate: 214 tons Mason's Spanish at 8s. 9d., and 229 tons on private terms, 80 tons English at 9s. to 9s. 4½d. per unit. Import of Chili copper during the past fortnight 917 tons fine, against 1212 tons fine same time last year. Delivery of Chili copper during the past fortnight 934 tons fine, against 1138 tons fine same time last year. Import of other copper during the past fortnight 2444 tons fine, against 1510 tons fine same time last year. Delivery of other copper during the past fortnight, 3010 tons fine, against 1336 tons fine same time last year. The total imports of Chili and other copper into Liverpool and Swansea since the 1st of January have been 37,748 tons; deliveries during the same period, 35,167 tons fine; for same time last year the figures were 32,670 and 37,729 tons respectively. Arrivals here during the fortnight of West Coast S. A. produce—Tafna (s.) from Valparaiso, 54 tons ore and 125 tons bars.—At Swansea: Vigil, from Carrizal, 836 tons regulus; Bessie Jose, from Carrizal, 924 tons regulus.

Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	—	1,483	24,616	120	—
Swansea	404	2,543	3,664	—	—
Total	404	4,026	28,280	120	—

Representing about 30,291 tons fine copper, against 30,308 tons 30th ult.; against 24,366 tons June 14, 1884; against 28,833 tons June 15, 1883; against 23,788 tons June 15, 1882. Stock of copper contained in other foreign ore and Spanish precipitate, 4738 tons fine, against 4160 tons June 14, 1884. Stock of Chili bars and ingots in Havre, 765 tons fine, against 1476 tons June 14, 1884. Stock of Coro Coro Barilla in Havre, 355 tons fine, against *nil* June 14, 1884. Stock of copper other than Chili in Havre, 1575 tons fine, against 80 tons June 14, 1884. Stock of Chili copper afloat and chartered for to date, 8313 tons fine, against 8390 tons June 14, 1884. Stock of foreign copper in London, chiefly Australian, 5567 tons fine, against 3636 tons June 14, 1884.

According to the Board of Trade Returns the total imports and exports into and from this country for the first five months of the following years were:—

IMPORTS.	1883.	1884.	1885.
Copper in ores ..... Tons	5,098	9,903	8,184
Copper in regulus and precipitate	14,043	12,580	21,832
Bars, cakes, and ingots	14,300	16,298	19,597
In pyrites, estimated	7,402	6,615	7,460
Total	41,343	45,396	57,123
EXPORTS.			
English copper—wrought and unwrought	14,097	18,108	15,580
Foreign copper—unwrought	4,784	4,813	2,613
Yellow metal	7,942	7,295	7,936
Total	26,823	30,216	26,129

Messrs. HENRY BATH and SONS, Swansea, write under date June 16:—The charters for the last fortnight from the West Coast are not yet announced. The latest advises give the price of bars as £17·10 and Exchange 26d. to 26⅛d. Considerable transactions in bars took place at the commencement of the fortnight, but prices afterwards gave way gradually until 44*l.* 7s. 6d. cash and 45*l.* three months were done. From this point an improvement set in, and we close steady at 44*l.* 12s. 6d. to 44*l.* 17s. 6d. cash and 45*l.* 5s. to 45*l.* 10s. three months. Deliveries for the fortnight are good, exceeding the imports though stocks of bars show a small increase. Owing to furnace material being relatively so much cheaper the consumptive demand has been thrown off bars, but when existing contracts come to an end smelters are not likely to get their material on such easy terms and we may then expect a better demand for bars. American imports are 1415 tons fine against 2683 last fortnight. Sales of furnace material comprise about 3000 tons Quebrada ores at 8s., 530 tons English and Quebrada regulus at 8s. to 8s. 1½d. and 480 tons Spanish and English precipitate at 8s. 10½d. to 9s. 1½d. per unit.

	Imports.	Deliveries.	Stocks.
Chili copper at Liverpool, Swansea, and in France	1347	1463	31,305
Foreign copper in London, chiefly Australian	133	251	5,567
American copper at Liverpool	1415	1593	638
Other copper at Liverpool and Swansea	1029	1417	4,102
American copper in France	390	485	1,595
Other copper in France	90	75	70
Tons fine copper during the fortnight	4404	5264	43,185
Against tons on the 1st June, 1885	5099	5283	44,015
Against tons on the 15th May, 1885	3010	5982	42,422

Imports.—The arrivals from the West Coast have been as follows:—At Swansea, Vigil, from Carrizal, 836 tons regulus; Bessie Jose, from Carrizal, &c., 924 tons regulus. At Liverpool, Tafna, from Guayacan, &c., 125 tons bars. In France, Tafna, from Guayacan 375 tons bars; Steamer, from Coastwise 55 tons bars. Equal 1760 tons regulus, 555 tons bars, equal 1347 tons fine.

Messrs. VIVIAN, BOND, and WATSON, Liverpool, write under date June 15:—The Chili charters for last half of May were advised 1st inst. as 1700 tons, all in bars and ingots, of which 900 tons for England, and 800 tons for the Continent. Price 817·02½ exchange 25⅝d. On the unsettled position of politics the market for Chili bars fell to 44*l.* 7s. 6d. to 44*l.* 15s., 14 days on 10th inst.; since which it has recovered to 45*l.* to 45*l.* 5s., at which it closed steady to-day. In furnace material the following sales are reported:—Here: 500 tons Quebrada regulus, and 2000 tons yellow Quebrada ore, and 50 tons Pisca ore, on private terms; 50 tons Quebrada regulus, and 150 tons Quebrada ore at 8s.—Swansea: 942 tons Bolivian ore, and 150 tons Garonne ore at 8s.—Precipitates: 214 tons Masons at 8s. 10½d., and 229 tons on private terms; 50 tons English at 9s. 4½d. and 30 tons at 9s. per unit.—Arrivals from West Coast, South America, during the past fortnight:—Here: Tafna, from Guayacan, 125 tons bars.—At Swansea: Vigil, from Carrizal, 936 regulus; Bassie Jose, from Carrizal and Valparaiso, 924 regulus. Equals about 917 tons fine copper, against 1691 tons 30th May, 1885. Arrivals of other than Chili—Liverpool: 2263 tons, against 2942 tons.—Swansea: 181 tons against 384 tons. Total, 2444 tons, against 3326 tons May 30, 1885, against 1510 tons June 14, 1884.

Stocks of copper produce (Chilian and Bolivian) are as follows:—

	Bars.	Ingots.	Regulus.	Ores.
Liverpool	24,616	120	1,483	—
Swansea	3,664	—	2,543	404
Total	28,280	120	4,026	404

Equals about 30,291 tons of fine copper, against 30,308 tons, 30th May, 1885; against about 24,366 tons fine copper 14th June, 1884; against about 26,833 tons of fine copper 15th June, 1883; against about 23,788 tons of fine copper 15th June, 1882; against about 3 ,753 tons of fine copper 15th June, 1881. Other stocks of fine copper contained in copper, ores, and precipitates—In Liverpool, 3177 tons; Swansea, 158: tons = 4738 tons, against 5374 tons 30th May, 1885.

BELL'S ASBESTOS.

BELL'S PATENT ASBESTOS BLOCK PACKING for High Pressure Engines.
The following testimonials refer to this Packing:—

Mona Lodge, Amlwich, Anglesey,
2nd August, 1884.

DEAR SIR,—I have much pleasure in answering your note. Bad times in mining have compelled me to try all kinds of expedients in order to effect saving; some have succeeded and some have failed, but my underground manager, Capt. Hughes, has just said to me by the telephone—"The Asbestos Packing is the best thing ever brought here."
It saves money and trouble, but like my gas purifying oxide it lasts so long that you must not expect another order from me for twelve months at least.
Yours truly,
T. F. EVANS,
Late H.M. Inspector of Metalliferous Mines.
Mr. J. Bell.

Manchester, Sheffield, and Lincolnshire Railway—Steamship Department,
Grimsby, April 10th, 1884.

DEAR SIR,—I have much pleasure in ating that after a trial of over nine months, and comparing it with other packings, I can confidently recommend your Asbestos Packing. It is especially valuable when high-pressures are employed, as in cases where other packings have perished, owing to high temperatures, your packing has invariably stood well. I have also used it with complete success when a gland has heated with other packings, and also in cases of badly scored piston rods. I consider the results I have obtained by its use for our marine engines to have been in every way highly satisfactory.
Yours truly,
G. H. CLARKE, Sup. Engineer.
Mr. J. Bell.

Department of the Director of Navy Contracts,
Admiralty, Whitehall, 20th June, 1884.

SIR,—I have to inform you that your tender has been accepted for Bell's Rolled Cloth Asbestos Packing to sample submitted:—Elastic core ... ... Square.
" " ... ... Round.
JOHN COLLETT, Director of Navy Contracts.
To Mr. John Bell.

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A Horizontal Boiler, 17 ft. 6 in. long, 15-H.P., gave the following results:—
Temperature on Plates - - - 186 deg.
" " Covering - - 94 deg.
One ton of coal was saved per week, and although the fire was raked out every evening, 20 lbs. of steam were found in the boiler next morning.
The following Testimonials refers to this Covering:—
Offices of the Wimbledon Local Board, Wimbledon, Nov. 28th, 1883.
DEAR SIR,—It may interest you to know that we save exactly 40 per cent. in fuel through using your covering.
Yours truly,
W. SANTO CRIMP, C.E., F.G.S.
Mr. John Bell, Southwark, S.E.
The Tamar and Kit Hill Granite Company (Limited),
Gunnislake, Tavistock, 8th April, 1884.
SIR,—I have much pleasure in stating that the Asbestos covering applied by you to the boiler of our travelling crane at Kit Hill has yielded most remarkable results. Since it has been in use we have saved fully half our coals, and have effected a great saving in the time it takes to get up steam, which is often a matter of great importance to us. I should add that the crane runs on high gantries, and is fully exposed to all weather. I have formed the highest opinion of your Asbestos as used for this purpose, and as you are aware, have had another boiler similarly covered, though it has not since been used. I can most strongly recommend the materi al.
I am, Sir, yours faithfully,
W. J. CHALK, Assoc.M.Inst.C.E., Engineer and Manager.

BELL'S ASBESTOS and INDIA-RUBBER WOVEN TAPE and SHEETING for making every class of Steam and Water Joints. It can be bent by hand to the form required without puckering, and is especially useful in making joints of manhole and mudhole doors. It is kept in stock in rolls of 100 ft., from ½ in. to 3 in. wide, and any thickness from 1/16 in. upwards. Manhole covers can be lifted many times before the renewal of the jointing material is necessary. The same material is made up into sheets about 40 in. square, and each sheet bears the Trade Mark, without which none is genuine. It is very necessary to guard against imitations of this useful material, and to secure themselves against being supplied with these inferior articles at my price, users are recommended to see that every 10 ft. length of the Asbestos Tape purchased by them bears the Trade Mark.

BELL'S ASBESTOS BOILER PRESERVATIVE.—This useful mixture by absorbing the free oxygen that is in the water entirely checks pitting and corrosion. It also disintegrates incrustation so immediately as to prevent its adhering to the plates. Not only is a great economy of fuel effected by keeping boilers clean, but the risk of having the plates burned is thereby obviated. It has been computed that 1/16 in. thick of incrustation causes a waste of 15 per cent. of coal; ¼ in., 60 per cent.; ½ in., 150 per cent.
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It is entirely harmless, and has no injurious action on metals. It can be put into the feed tank or boiler, as may be most convenient.
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Sandwell Park Colliery, Smethwick, 1st February, 1884.
To Bell's Asbestos Works.
DEAR SIRS,—I have much pleasure in stating that I have used your Asbestos Packing for the last 13 months for our large winding engines which are running night and day, and also for the fan, pumping, and hauling engines at the above Colliery, and during that period we have not used more than one-third the Packing we had formerly; and this I attribute to your Packing on account of its great durability and general excellence of quality.
I am, dear Sirs,
Yours faithfully,
THOMAS WINTER, Colliery Engineer.

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The following copy of acceptance of tender refers to above:—

Department of the Director of Navy Contracts.
Admiralty, Whitehall, S.W., 17th May, 1884.

SIR,—I have to inform you that your tender for Asbestos Millboard has been accepted.—Mr. John Bell.
JOHN COLLETT, Director of Navy Contracts.

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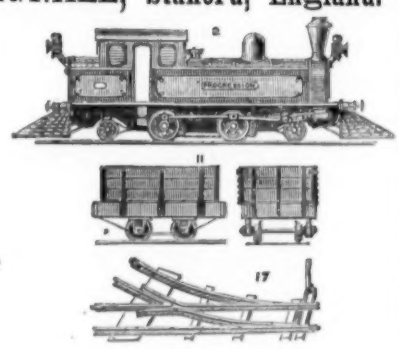

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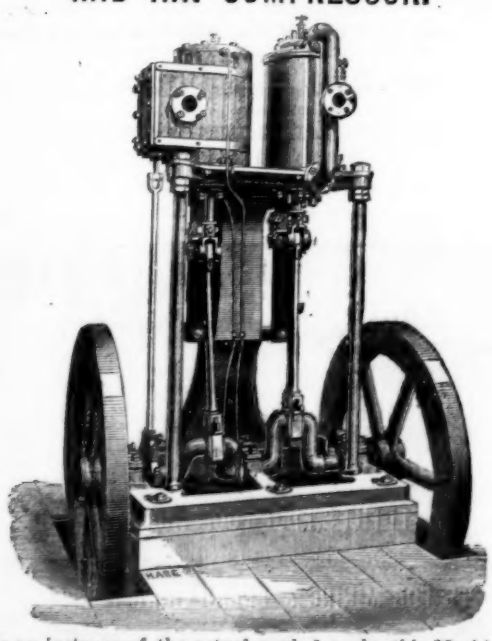

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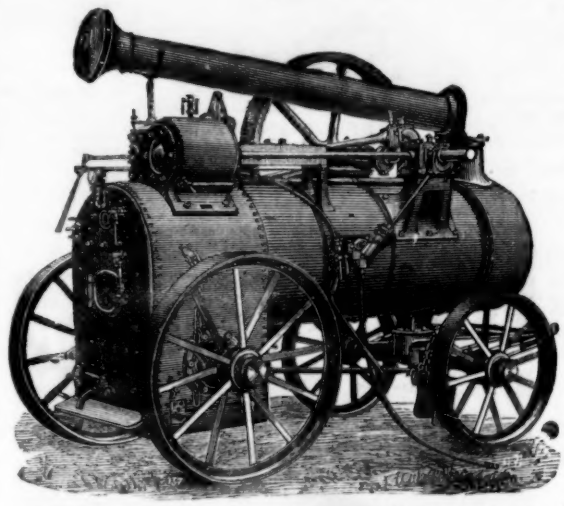

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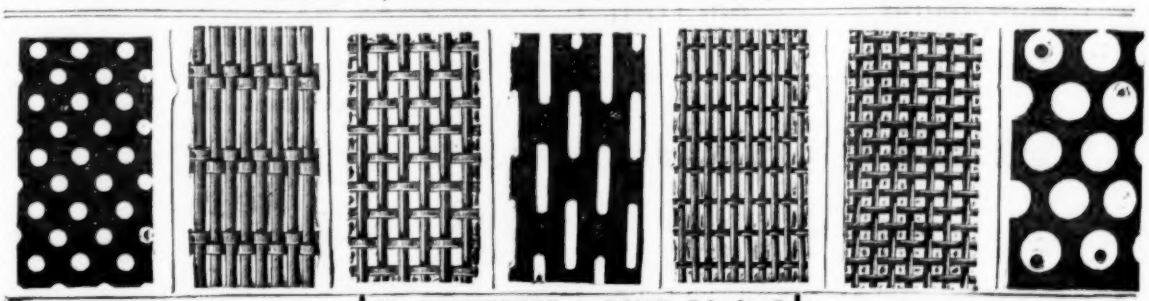

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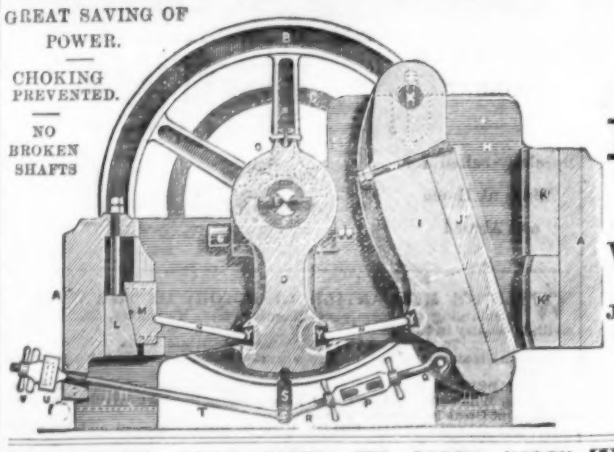

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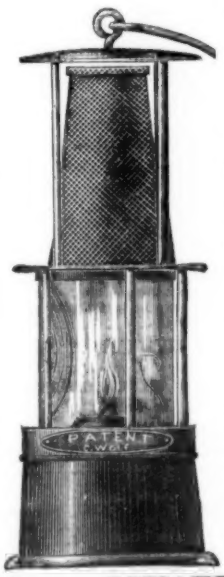

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